



SDS for Engraving Filler
color

White	Red Devil	
Pink	Red Devil	DayGlo GT-11
Green	Red Devil	DayGlo GT-17N, T-18N
Orange	Red Devil	DayGlo GT-15N
Yellow	Red Devil	DayGlo T-16, GT-17N
Blue	Red Devil	Milliken X17AB, X15
Red	Red Devil	Milliken X64, X96
Purple	Red Devil	Milliken X64, X80LT
Black	Red Devil	Milliken X95AB

SDS for Dye
color

White	Tadco 3741S	Milliken Disperstich 2204
Pink	Tadco 3741S	DayGlo GT-11
Green	Tadco 3741S	DayGlo T-18N
Orange		Milliken X96
Yellow		Milliken X15
Blue	Tadco 3741S	Milliken X17AB
Red	Tadco 3741S	Milliken X64
Black	Tadco 3741S	Milliken X95AB
Violet/Purple	Tadco 3741S	Milliken X80LT



Safety Data Sheet

RD-0037-CA - Overtime Spackling - 1/2 pint, Quart & Pint

Revision Date: 23-Apr-2014

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Acrylic Emulsion	MIXTURE	35-60
Soda lime borosilicate glass	65997-17-3	10-30

Inhalation of particulates unlikely due to product's physical state.

4. FIRST-AID MEASURES

General Advice	If exposed or concerned: Get medical advice/attention.
Eye Contact	Immediately flush with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention.
Skin Contact	Wash affected areas thoroughly with soap and water for at least 15 minutes. If skin irritation persists, call a physician. Take off contaminated clothing. Wash contaminated clothing before reuse.
Inhalation	Remove to fresh air. If breathing becomes difficult, call a physician.
Ingestion	Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a physician or poison control center immediately.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammability properties	Not flammable.
Flash Point	> 200 °F / > 93 °C
Suitable Extinguishing Media	Carbon dioxide (CO2), Dry chemical, Foam, Water spray (fog). Use extinguishing agent suitable for type of surrounding fire.
Unsuitable Extinguishing Media	None known.
Hazardous Combustion Products	Carbon oxides, Nitrogen oxides (NOx).
Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Specific Hazards Arising from the Chemical	None known.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods for Containment	Gently cover spill with polyads.

1. IDENTIFICATION

Product Name: Overtime Spackling - 1/2 pint, Quart & Pint

MSDS #: RD-0037-CA

Other Information: 0542CA, 0544CA, 0546CA.

Supplier Address: Red Devil, Inc. 4175 Webb Street Pryor, Oklahoma 74361 www.reddevil.com

Company Phone Number: 918-825-5744 Fax: 918-825-5761 Emergency Telephone (24 hr): INFOTRAC 1-352-323-3500 (International) 1-800-835-5053 (North America)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause eye, skin and respiratory tract irritation

Appearance: White paste Physical State: Paste Odor: Mild acrylic/ammoniacal

Potential Health Effects

Acute Toxicity	
Eye Contact	May cause mild eye irritation.
Skin Contact	May cause mild skin irritation.
Inhalation	Mildly irritating to respiratory tract.
Ingestion	May cause discomfort if swallowed.
Chronic effects	No known effect based on information supplied.
Symptoms	Eyes may have symptoms of redness, itching, irritation and watering from overexposure. May cause gastro-intestinal irritation, nausea, diarrhea, and vomiting. Overexposure to vapors during application and curing may mildly irritate respiratory tract and result in coughing and sneezing. Prolonged or repeated skin contact may result in dermatitis (red, dry skin).
Aggravated Medical Conditions	None known.
Environmental Hazard	See Section 12: ECOLOGICAL INFORMATION

RD-0037-CA - Overtime Spackling - 1/2 pint, Quart & Pint

Revision Date: 23-Apr-2014

Methods for Clean-Up: Pick up and transfer to properly labeled containers. Take up with sand or other non-combustible absorbent material and place into containers for later disposal. Do not mix with wastes from other materials. Wash area with soap and water.

7. HANDLING AND STORAGE

Advice on Safe Handling: Keep out of reach of children and pets. Do not take internally. Do not breathe vapors. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Open windows and doors to ensure cross-ventilation and fresh air during application and curing. When using do not eat, drink or smoke. See section 8 of this SDS for clean up instructions. Use personal protection recommended in Section 8. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Do not store at high temperatures. Protect from freezing. Store away from incompatible materials. To maximize shelf life, store at temperatures below 26°C (80°F). Store locked up.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Canada - Alberta - Occupational Exposure Limits - Ceiling	Canada - British Columbia - Occupational Exposure Limits - Ceiling	Canada - Manitoba - Occupational Exposure Limits - Ceiling	Canada - New Brunswick - Occupational Exposure Limits - Ceiling	Canada - Newfoundland & Labrador - Occupational Exposure Limits - Ceiling
Soda lime borosilicate glass (6867-17-3) (10-30)	TLV: 1 (Respirable fraction length > 5 µm, except ratio >= 5:1, as determined by the membrane flow method at 400-450X magnification K_{-min} objective), using phase-contrast illumination. TWA: 5 mg/m ³ Inhalable fraction			TWA: 1 mg/m ³ TWA: 1 fibrous/3	TLV: 1 (Respirable fraction) TWA: 5 mg/m ³			

Engineering Controls: Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Personal protective equipment (PPE)

Eye/Face Protection	Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations & standards.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Take off all contaminated clothing and wash it before reuse.

RD-0037-CA - Overtime Spackling - 1/2 pint, Quart & Pint

Revision Date: 23-Apr-2014

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Paste	Odour	Mild Acrylic/ammoniacal
Appearance	White paste	Colour	White
Odour Threshold	Not determined		
Property	Values	Remarks - Method	
pH	7-10		
Melting Point/Freezing Point	Not established		
Boiling Point/Boiling Range	Not established		
Flash Point	> 93 °C / > 200 °F		
Evaporation Rate	Slower than n-Butyl Acetate		
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	Unknown		
Lower Flammability Limit	Not determined		
Vapour Density	Not determined		
Relative Density	Not determined		
Vapour Pressure	Not determined		
Water Solubility	Soluble in water		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Unknown		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not an explosive		
Oxidizing Properties	Not determined		
VOC Content (%)	<0.5%/wt		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Incompatible Materials	Strong oxidizing agents, Strong caustics.
Conditions to Avoid	Excessive heat. Keep from freezing.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx).
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	
Product Information	
Inhalation	Mildly irritating to respiratory tract.
Eye Contact	May cause mild eye irritation.
Skin Contact	May cause mild skin irritation.
Ingestion	May cause discomfort if swallowed.

Chronic toxicity

Carcinogenicity Trace residual Formaldehyde present in base emulsion viewed as possible cancer hazard.

Chemical Name	ACGIH	IARC	NTP	OSHA
Soda lime borosilicate glass		Group 3		

IARC (International Agency for Research on Cancer)
Group 3 IARC components are "not classifiable as human carcinogens"

Target organ effects None known

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Persistence/Degradability Not tested for persistence & biodegradability.

Bioaccumulation Not tested for bio-accumulation potential.

Mobility Not tested for mobility in soil.

Other Adverse Effects Not determined.

13. DISPOSAL CONSIDERATIONS

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

TDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECBC	KECL	PICCS	AICS
Soda lime borosilicate glass	Present	X		Present		Present	X	Present	X	X

NDSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECBC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Not determined
Chronic Health Hazard	Not determined
Fire Hazard	Not determined
Sudden Release of Pressure Hazard	Not determined
Reactive Hazard	Not determined

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

International Regulations

CANADA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR
WHMIS Hazard Class
D05 - Toxic materials



Canadian Provincial OEL

Component	Canada - Alberta Occupational Exposure Limits - Carcinogens	Canada - Alberta Occupational Exposure Limits - Designated Substances	Canada - Alberta Occupational Exposure Limits - Simple Asphyxiants	Canada - Alberta Occupational Exposure Limits - Skin Notations	Canada - Alberta Occupational Exposure Limits - STELs	Canada - Alberta Occupational Exposure Limits - TWAs
Soda lime borosilicate glass (6997-17-3 (10-30))	-	-	-	-	-	5 mg/m ³ TWA 4 Residual TWA

Component	Canada - British Columbia Occupational Exposure Limits - Carcinogens	Canada - British Columbia Occupational Exposure Limits - Designated Substances	Canada - British Columbia Occupational Exposure Limits - Sensitizers	Canada - British Columbia Occupational Exposure Limits - Simple Asphyxiants	Canada - British Columbia Occupational Exposure Limits - Skin Notations	Canada - British Columbia Occupational Exposure Limits - STELs	Canada - British Columbia Occupational Exposure Limits - TWAs
Soda lime borosilicate glass (6997-17-3 (10-30))	-	-	-	-	-	-	10 mg/m ³ TWA 5 mg/m ³ TWA

Component	Canada - Ontario Occupational Exposure Limits - Designated Substances	Canada - Ontario Occupational Exposure Limits - Simple Asphyxiants	Canada - Ontario Occupational Exposure Limits - Skin Notations	Canada - Ontario Occupational Exposure Limits - STELs	Canada - Ontario Occupational Exposure Limits - TWAs	Canada - Prince Edward Island Occupational Exposure Limits - STELs	Canada - Prince Edward Island Occupational Exposure Limits - TWAs
Soda lime borosilicate glass (6997-17-3 (10-30))	-	-	-	-	10 mg/m ³ TWA 5 mg/m ³ TWA	-	-

Component	Canada - Quebec Occupational Exposure Limits - Carcinogens	Canada - Quebec Occupational Exposure Limits - Sensitizers	Canada - Quebec Occupational Exposure Limits - Simple Asphyxiants	Canada - Quebec Occupational Exposure Limits - Skin Designations	Canada - Quebec Occupational Exposure Limits - STELs	Canada - Quebec Occupational Exposure Limits - TWAs Substance Whose Exposure Should Be Controlled	Canada - Quebec Occupational Exposure Limits - TWAs
Soda lime borosilicate glass (6997-17-3 (10-30))	-	-	-	-	-	-	10 mg/m ³ TWAEV

16. OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 1	Stability 0	Special Hazards X
HMIS	Health Hazards 1	Flammability 1	Physical Hazards 0	Personal Protection

Issue Date: 18-Apr-2014
Revision Date: 23-Apr-2014
Revision Note: Not Applicable

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



SDS T.A. DAVIES CO SDS

TADCO 3741S

SDS Number: TADCO 3741S

Revision Date: 1/6/2016
Page 1 of 6

PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

T. A. DAVIES
1800 SOUTH ALAMEDA STREET
RANCHO DOMINGUEZ, CA 90221

Emergency: CHEMTREC 800-424-9300 (24 HOURS)
Phone: (310)784-0820
Fax: (310)784-0822
Email: TADCO@TADAVIES.COM
Web: WWW.TADAVIES.COM

HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):
Health, Serious Eye Damage/Eye Irritation, 2 A

GHS Label elements, including precautionary statements

GHS Signal Word: WARNING

GHS Hazard Pictograms:



GHS Hazard Statements:

H319 - Causes serious eye irritation

GHS Precautionary Statements:

- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 - Wash exposed skin thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+352 - IF ON SKIN: Wash with soap and water.
- P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 - Rinse mouth.
- P332+313 - If skin irritation occurs: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P501 - Dispose of contents/container to a licensed waste disposal services provider.

Hazards not otherwise classified (HNOC) or not covered by GHS



SDS T.A. DAVIES CO SDS

TADCO 3741S

SDS Number: TADCO 3741S

Revision Date: 1/6/2016
Page 2 of 6

Route of Entry:

Eyes; Ingestion; Inhalation; Skin;

Target Organs:

Eyes; Skin; Respiratory system;

Inhalation:

Heating, spraying, foaming or otherwise mechanically dispersing operations may generate vapor or aerosol concentrations sufficient to cause irritation or other adverse effects. Minimal respiratory tract irritation may occur with exposure to a large amount of material.

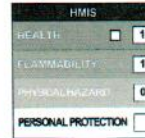
Skin Contact:

Prolonged or repeated exposure can cause skin irritation or dermatitis in some individuals.

Eye Contact:

May cause watering of the eye and irritation of the conjunctiva.

NFPA: Health = 1, Fire = 1, Reactivity = 0, Specific Hazard = None
HMIS III: Health = 1, Fire = 1, Physical Hazard = 0



COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CAS#	%	Chemical Name
0	15-20%	non-hazardous
25214-63-5	15-20%	1,2-Ethanedithiolane, polymer with methyloxirane
6846-50-0	60-65%	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate

FIRST AID MEASURES

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility immediately.

Skin Contact:

Remove all contaminated clothing and shoes. Wash skin with large quantities of water and soap. Wash clothing before wearing again and clean shoes. If redness, itching or a burning sensation develops or persists after the area is washed, consult a physician.

Eye Contact:

Flush with large amounts of water for 15 minutes. Use fingers to assure that the eyelids are separated and that the eye is being irrigated. Get immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. This material is an aspiration hazard. Never give anything by mouth to an unconscious person. Seek medical attention.

FIRE FIGHTING MEASURES

Flash Point:

277°F

Flash Point Method:

COC

Dry powder, foam, carbon dioxide. Use cold water spray to cool fire exposed containers to minimize risk of rupture. A solid stream of water directed into hot burning liquid could cause frothing. If possible, contain fire run off.

ACCIDENTAL RELEASE MEASURES

the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [60-65%] : no data available

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Non-Pigmented liquid.	Odor:	Mild
Physical State:	Liquid	Solubility:	No data available
Odor Threshold:	No data available	Freezing/Melting Pt.:	No data available
Spac Grav./Density:	N/A	Flash Point:	277°F
Viscosity:	No data available	Vapor Density:	>1
Boiling Point:	>536°F	Auto-ignition Temp.:	No data available
Flammability:	None Flammable	UFL/FL:	No data available
Partition Coefficient:	No data available		
Vapor Pressure:	No data available		
pH:	<1		
Evap. Rate:	<1		
Decomp Temp.:	No data available		

STABILITY AND REACTIVITY

Reactivity:	No specific data
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	No specific data
Materials to Avoid:	Oxidizing Materials
Hazardous Decomposition:	Under normal storage conditions hazardous decomposition products should not be produced.
Hazardous Polymerization:	Will not occur.

TOXICOLOGICAL INFORMATION

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [60-65%]

Information on toxicological effects

Acute toxicity:	
LD50 Oral - rat - female - > 2,000 mg/kg	
Inhalation: no data available	
LD50 Dermal - rabbit - male and female - > 2,000 mg/kg (OECD Test Guideline 402)	
Skin corrosion/irritation: Skin - rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)	
Serious eye damage/eye irritation: Eyes - rabbit Result: No eye irritation (OECD Test Guideline 405)	
Respiratory or skin sensitisation: no data available	



SDS T.A. DAVIES CO SDS

TADCO 3741S

SDS Number: TADCO 3741S

Revision Date: 1/6/2016
Page 3 of 6

Spill: Remove all sources of flames, heating elements, gas engines, etc. Emergency clean-up personnel should wear chemical goggles, rubber or plastic gloves and clothing as required to protect against contact. Prevent spreading and contamination of surface waters and drinking supplies. Notify local health officials and other appropriate agencies if such contamination should occur.
Clean up: With adequate ventilation and appropriate personal protective equipment, cover the area with an inert absorbent material such as clay or vermiculite and transfer to steel waste containers. Ventilate area to remove the remaining vapors.

HANDLING AND STORAGE

Handling Precautions:

Do not smoke or use naked lights, open flames, space heaters or other ignition sources near pouring, frothing or spraying operations. If contamination with isocyanates is suspected, do not reuse containers. Special Emphasis for spray applications of mixed products containing isocyanates: inspect the application area for potential to expose other persons or for overspray to drift onto buildings, vehicles or other property. When spraying building exteriors, persons entering or exiting the building as well as those inside could be exposed to polyisocyanates due to wind conditions, open windows or air intakes. Do not begin application work until these potential problems have been corrected.

Storage Requirements:

When stored between 60°-85° F in sealed containers, typical shelf life is 6 months or more from the date of manufacture. Open containers must be handled properly to prevent moisture pickup.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Uses requiring heating and/or spraying may require more aggressive engineering controls or PPE.

Personal Protective Equipment:

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Splash contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 30 min Material tested: Butylgloj (KCL 897 / Aldrich Z677647, Size M) data source: KCL GmbH, D-36124 Elchenzell, phone +49 (0)659 87300, e-mail sales@kcl.de, test method: EN374 if used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to



SDS T.A. DAVIES CO SDS

TADCO 3741S

SDS Number: TADCO 3741S

Revision Date: 1/6/2016
Page 4 of 6

the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [60-65%] : no data available

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Non-Pigmented liquid.	Odor:	Mild
Physical State:	Liquid	Solubility:	No data available
Odor Threshold:	No data available	Freezing/Melting Pt.:	No data available
Spac Grav./Density:	N/A	Flash Point:	277°F
Viscosity:	No data available	Vapor Density:	>1
Boiling Point:	>536°F	Auto-ignition Temp.:	No data available
Flammability:	None Flammable	UFL/FL:	No data available
Partition Coefficient:	No data available		
Vapor Pressure:	No data available		
pH:	<1		
Evap. Rate:	<1		
Decomp Temp.:	No data available		

STABILITY AND REACTIVITY

Reactivity:	No specific data
Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	No specific data
Materials to Avoid:	Oxidizing Materials
Hazardous Decomposition:	Under normal storage conditions hazardous decomposition products should not be produced.
Hazardous Polymerization:	Will not occur.

TOXICOLOGICAL INFORMATION

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [60-65%]

Information on toxicological effects

Acute toxicity:	
LD50 Oral - rat - female - > 2,000 mg/kg	
Inhalation: no data available	
LD50 Dermal - rabbit - male and female - > 2,000 mg/kg (OECD Test Guideline 402)	
Skin corrosion/irritation: Skin - rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)	
Serious eye damage/eye irritation: Eyes - rabbit Result: No eye irritation (OECD Test Guideline 405)	
Respiratory or skin sensitisation: no data available	



SDS T.A. DAVIES CO SDS
T. A. DAVIES

TADCO 3741S

SDS Number: TADCO 3741S

Revision Date: 1/8/2016
Page 5 of 6

Germ cell mutagenicity: Hamster ovary Result: negative

Carcinogenicity:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

Repeated dose toxicity - rat - male - No observed adverse effect level - 150 mg/kg RTECS: SA1420000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

ECOLOGICAL INFORMATION

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [60-65%]

Information on ecological effects

Toxicity:

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - > 1.55 mg/l - 96 h. (OECD Test Guideline 203)

Toxicity to algae Growth inhibition EC50 - Selenastrum capricornutum (green algae) - > 7.49 mg/l - 72 h (OECD Test Guideline 201)

Persistence and degradability: Biodegradability aerobic - Exposure time 28 d Result: 70.73 % - Readily biodegradable. (OECD Test Guideline 301B) Remarks: The 10 day time window criterion is not fulfilled.

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available



SDS T.A. DAVIES CO SDS
T. A. DAVIES

TADCO 3741S

SDS Number: TADCO 3741S

Revision Date: 1/8/2016
Page 5 of 6

DISPOSAL CONSIDERATIONS

Disposal: Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material. Do not allow material to enter sewers, a body of water, or contact the ground. Refer to RCRA 40 CFR 261, and/or any other appropriate federal, state or local requirements for proper classification information.

TRANSPORT INFORMATION

Not DOT/RCRA Regulated

IATA/IMDG/ICAO Non regulated

REGULATORY INFORMATION

Component (CAS#) [%] - CODES

1,2-Ethanediamine, polymer with methyloxirane (25214-63-5) [15-20%] TSCA

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (6846-50-0) [60-65%] TSCA

Regulatory CODE Descriptions

IARC = IARC Carcinogen Risks

TSCA = Toxic Substances Control Act

OTHER INFORMATION

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

SAFETY DATA SHEET

Revision Date 23-May-2015
Version 2

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product name Aurora Pink® Pigment
Product code GT-11

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Pigment
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

E-mail Address ehs@dayglo.com

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3867 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

2.2 Label elements

This product is not classified.

2.3 Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

3. Composition/information on ingredients

Substance

Chemical Name	CAS-No	Weight %
C.I. Basic Red 1:1	3068-39-1	1 - 8

23-May-2015 - GT-11 - 2 - AGHS - English -

Page 1 / 8

GT-11 - Aurora Pink® Pigment

Revision Date 23-May-2015

Triethanolamine	102-71-6	< 1
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* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice No information available.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eyes wide open while rinsing. If symptoms persist, call a physician.

Skin contact Immediate medical attention is not required. Wash off with soap and water.

Inhalation Immediate medical attention is not required. Move to fresh air.

Ingestion Do NOT induce vomiting. Drink plenty of water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Recommendations for immediate medical care and/or special treatment

Notes to physician Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Specific hazards arising from the substance or mixture

Special Hazard None known based on information supplied

Hazardous Combustion Products Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment.

6.2 Environmental precautions

Dust deposits should not be allowed to accumulate on surfaces as these may form an explosive mixture if they are released into

23-May-2015 - GT-11 - 2 - AGHS - English -

Page 2 / 8

GT-11 - Aurora Pink® Pigment

Revision Date 23-May-2015

the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., cleaning dusty surfaces with compressed air). Nonsparking tools should be used. Prevent product from entering drains. See Section 12 for additional Ecological Information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Prevent dust cloud. Cover powder spill with plastic sheet or tarp to minimize spreading.**Methods for cleaning up** Avoid dust formation. Take precautionary measures against static discharges. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Use personal protective equipment. Take up mechanically and collect in suitable container for disposal. Prevent product from entering drains. Keep in suitable and closed containers for disposal.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Avoid dust formation. Take precautionary measures against static discharges. Fine dust dispersed in air may ignite. Wear personal protective equipment.**Hygiene measures** Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place.**Materials to Avoid** No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Occupational Exposure Limits (OEL)

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWA/EL
Triethanolamine 102-71-6	TWA: 5 mg/m ³	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5.5 ppm TWA: 3.1 mg/m ³

8.2 Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

Hygiene measures See section 7 for more information

23-May-2015 - GT-11 - 2 - AGHS - English -

Page 3 / 8

GT-11 - Aurora Pink® Pigment

Revision Date 23-May-2015

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	Values	Remarks - Methods
Physical state	Solid	No information available
Appearance	Powder	No information available
Color	Pink	No information available
Odor	Pungent	No information available
Odor Threshold	No information available	No information available
pH	Not Applicable	No information available
Melting/freezing point	Not applicable	No information available
Boiling point/boiling range	Not Applicable	No information available
Flash Point	Not Applicable	No information available
Evaporation rate	Not Applicable	No information available
Flammability (solid, gas)	Not Applicable	No information available
Flammability Limits in Air		No information available
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure	Not Applicable	No information available
Vapor density		No information available
Specific Gravity	1.37	
Water solubility	Insoluble in water	No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) None content

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Dust formation. Take precautionary measures against static discharges.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

23-May-2015 - GT-11 - 2 - AGHS - English -

Page 4 / 8

None known based on information supplied.

11. Toxicological Information**11.1 Acute toxicity**

Numerical measure of toxicity: Product information

LD50 Oral: > 16,000 mg/kg (rat)	LD50 Dermal: > 23,000 mg/kg (rat)
------------------------------------	--------------------------------------

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50 41,963.00 mg/kg

Numerical measures of toxicity: Component information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Triethanolamine 102-71-6	4190 mg/kg (Rat)	> 20 mL/kg (Rabbit)	-

11.2 Information on toxicological effects**Skin corrosion/irritation**

Product information:

* Not a dermal irritant

Component information:

* No information available

Eye damage/irritation

Product information:

* Dust contact with the eyes can lead to mechanical irritation

Component information:

* No information available

Respiratory or skin sensitization

Product information:

* No information available

Component information:

* No information available

Germ Cell Mutagenicity

Product information:

* No information available

Component information:

* No information available

Carcinogenicity

* This product contains <0.1% free formaldehyde and may be capable of outgassing formaldehyde at levels in excess of OSHA's Action Level under some conditions of use. Formaldehyde is a known cancer hazard. Long term exposure may result in dermatitis or respiratory sensitization for sensitive individuals.

Reproductive toxicity

Product information:

* No information available

Component information:

* No information available

STOT - single exposure

No information available

STOT - repeated exposure

* No known effect

Other adverse effects

Target Organ:

* No information available

Product information:

* No information available

Component information:

* No information available

Aspiration hazard

Product information:

* No information available

Component information:

* No information available

12. Ecological Information**12.1 Toxicity**

Ecotoxicity: No information available

< 1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Triethanolamine 102-71-6	EC50: 72 h Desmodesmus subspicatus 216 mg/L EC50: 96 h Desmodesmus subspicatus 169 mg/L	LC50: 96 h Pimephales promelas 10000 - 13000 mg/L flow-through LC50: 96 h Pimephales promelas 1000 mg/L static LC50: 96 h Lepomis macrochirus 450 - 1000 mg/L static	-

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
Triethanolamine 102-71-6	-2.53

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

14. Transport Information

DOT	Not regulated
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory Information**15.1 International Inventories**

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECS	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECS - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Formaldehyde - 50-00-0	Carcinogen

16. Other information

NFPA	Health Hazard 0	Flammability -	Instability -	Physical and chemical hazards -
HMS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S*)

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

Prepared By DayGlo Color Corp.

Regulatory Affairs/Product Safety

Revision Date 23-May-2015

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 23-May-2015
Version 2

GT-17-N - Saturn Yellow® Pigment

Revision Date 23-May-2015

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product name Saturn Yellow® Pigment
Product code GT-17-N

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Pigment
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier DayGlo Color Corp.
4515 St. Clair Avenue
Cleveland, OH 44103
(216) 391-7070
*1216-391-7070 (outside the US) This telephone number is available during office hours only.

E-mail Address ehs@dayglo.com

1.4 Emergency telephone number

Emergency telephone number Chemtec: +1 703-527-3867 ex-USA
Chemtec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

2.2 Label elements

This product is not classified.

2.3 Other Hazards (Hazards not otherwise classified (HNOC))

Not Applicable

2.4 Other information

Not Applicable

23-May-2015 - GT-17-N - 2 - AGHS - English -

Page 1 / 8

3. Composition/Information on Ingredients

Substance

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice No information available.
Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin contact Immediate medical attention is not required. Wash off with soap and water.
Inhalation Immediate medical attention is not required. Move to fresh air.
Ingestion Do NOT induce vomiting. Drink plenty of water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed.

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Recommendations for immediate medical care and/or special treatment

Notes to physician Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Specific hazards arising from the substance or mixture

Special Hazard None known based on information supplied

Hazardous Combustion Products Carbon oxides, Nitrogen oxides (NOx), Oxides of sulfur.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

GT-17-N - Saturn Yellow® Pigment

Revision Date 23-May-2015

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment.

6.2 Environmental precautions

Dust deposits should not be allowed to accumulate on surfaces as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., cleaning dusty surfaces with compressed air). Nonsparking tools should be used. Prevent product from entering drains. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Prevent dust cloud. Cover powder spill with plastic sheet or tarp to minimize spreading.
Methods for cleaning up Avoid dust formation. Take precautionary measures against static discharges. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Use personal protective equipment. Take up mechanically and collect in suitable container for disposal. Prevent product from entering drains. Keep in suitable and closed containers for disposal.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Avoid dust formation. Take precautionary measures against static discharges. Fine dust dispersed in air may ignite. Wear personal protective equipment.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Occupational Exposure Limits (OEL)

8.2 Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.
Skin and body protection Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.
Respiratory protection If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.
Hygiene measures See section 7 for more information

23-May-2015 - GT-17-N - 2 - AGHS - English -

Page 3 / 8

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Solid
Appearance Powder
Color Yellow
Odor Pungent
Odor Threshold No information available
Property Values Remarks - Methods
pH Not Applicable No information available
Melting/freezing point Not applicable No information available
Boiling point/boiling range Not Applicable No information available
Flash Point Not Applicable No information available
Evaporation rate Not Applicable No information available
Flammability (solid, gas) No information available
Flammability Limits in Air upper flammability limit No information available
lower flammability limit No information available
Vapor pressure No information available
Vapor density No information available
Specific Gravity 1.37 No information available
Water solubility insoluble in water No information available
Solubility in other solvents No information available
Partition coefficient No information available
Autoignition temperature No information available
Decomposition temperature No information available
Viscosity, kinematic No information available
Viscosity, dynamic No information available
Explosive properties No information available
Oxidizing Properties No information available
9.2 Other Information
Volatile organic compounds (VOC) None content

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Dust formation. Take precautionary measures against static discharges.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

23-May-2015 - GT-17-N - 2 - AGHS - English -

Page 4 / 8

None known based on information supplied.

11. Toxicological Information**11.1 Acute toxicity**

Numerical measures of toxicity: Product Information

LD50 Oral: > 16,000 mg/kg (rat)	LD50 Dermal: > 23,000 mg/kg (rat)
------------------------------------	--------------------------------------

Numerical measures of toxicity: Component Information

11.2 Information on toxicological effects**Skin corrosion/irritation**

Product Information

- Not a dermal irritant
- No information available

Eye damage/irritation

Product Information

- Dust contact with the eyes can lead to mechanical irritation
- No information available

Respiratory or skin sensitization

Product Information

- No information available
- No information available

Germ Cell Mutagenicity

Product Information

- No information available
- No information available

Carcinogenicity

- This product contains <0.1% free formaldehyde and may be capable of outgassing formaldehyde at levels in excess of OSHA's Action Level under some conditions of use. Formaldehyde is a known cancer hazard. Long term exposure may result in dermatitis or respiratory sensitization for sensitive individuals.

Reproductive toxicity

Product Information

- No information available
- No information available

STOT - single exposure

No information available

STOT - repeated exposure

No information available

- No known effect

Other adverse effects**Target Organs**

- No information available
- No information available
- No information available
- No information available

Aspiration hazard

Product Information

- No information available
- No information available

12. Ecological Information**12.1 Toxicity**

No information available

Ecotoxicity

< 1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects**12.2 Persistence and degradability**

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

14. Transport Information

DOT Not regulated

MEX Not regulated

IMDG Not regulated

IATA Not regulated

15. Regulatory Information**15.1 International Inventories**

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL - Canadian Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECS - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances
 NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313
 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Formaldehyde - 50-00-0	Carcinogen

16. Other information

MFPA	Health Hazard 0	Flammability -	Instability -	Physical and chemical hazards -
HMIS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)
 Ceiling (C)
 DOT (Department of Transportation)
 EPA (Environmental Protection Agency)
 IARC (International Agency for Research on Cancer)
 International Air Transport Association (IATA)
 International Maritime Dangerous Goods (IMDG)
 NIOSH (National Institute for Occupational Safety and Health)
 NTP (National Toxicology Program)
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 PEL (Permissible Exposure Limit)
 Reportable Quantity (RQ)
 Skin designation (S)
 STEL (Short Term Exposure Limit)
 TLV (Threshold Limit Value)

TWA (time-weighted average)

Prepared By DayGlo Color Corp.
 Regulatory Affairs/Product Safety
 Revision Date 23-May-2015

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET


 Revision Date 23-May-2015
 Version 2

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

 Product name Signal Green™ Pigment
 Product code T-16-N

1.2 Relevant identified uses of the substance or mixture and uses advised against

 Recommended Use Pigment
 Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

 Supplier DayGlo Color Corp.
 4516 St. Clair Avenue
 Cleveland, OH 44103
 (216) 391-7070
 +1 216-391-7070 (outside the US) This telephone number is available during office hours only.

E-mail Address ehe@dayglo.com

1.4 Emergency telephone number

 Emergency telephone number Chemtrec: +1 703-527-3867 ex-USA
 Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

2.2 Label elements

This product is not classified.

2.3 Other Hazards, Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

23-May-2015 - T-16-N - 2 - AGHS - English -

Page 1 / 8

T-16-N - Signal Green™ Pigment

Revision Date 23-May-2015

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment.

6.2 Environmental precautions

Dust deposits should not be allowed to accumulate on surfaces as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., cleaning dusty surfaces with compressed air). Nonsparking tools should be used. Prevent product from entering drains. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment	Prevent dust cloud. Cover powder spill with plastic sheet or tarp to minimize spreading.
Methods for cleaning up	Avoid dust formation. Take precautionary measures against static discharges. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Use personal protective equipment. Take up mechanically and collect in suitable container for disposal. Prevent product from entering drains. Keep in suitable and closed containers for disposal.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Avoid dust formation. Take precautionary measures against static discharges. Fine dust dispersed in air may ignite. Wear personal protective equipment.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Occupational Exposure Limits (OEL)

8.2 Appropriate engineering controls

 Engineering Measures Showers
 Eyewash stations
 Ventilation systems.

8.3 Individual protection measures, such as personal protective equipment

Eyes/Face Protection	Safety glasses with side-shields.
Skin and body protection	Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.
Respiratory protection	If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.
Hygiene measure	See section 7 for more information

23-May-2015 - T-16-N - 2 - AGHS - English -

Page 3 / 8

T-16-N - Signal Green™ Pigment

Revision Date 23-May-2015

3. Composition/Information on Ingredients

Substance

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1 Description of first-aid measures

General advice	No information available.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eyes wide open while rinsing. If symptoms persist, call a physician.
Skin contact	Immediate medical attention is not required. Wash off with soap and water.
Inhalation	Immediate medical attention is not required. Move to fresh air.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Recommendations for immediate medical care and/or special treatment

Notes to physician Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Specific hazards arising from the substance or mixture

Special Hazard None known based on information supplied

Hazardous Combustion Products Carbon oxides, Nitrogen oxides (NOx), Oxides of sulfur.

Explosion Data

 Sensitivity to Mechanical Impact None.
 Sensitivity to Static Discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

23-May-2015 - T-16-N - 2 - AGHS - English -

Page 2 / 8

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid	
Appearance	Powder	
Color	Green	
Odor	Pungent	
Odor Threshold	No information available	
Property	Values	Remarks - Methods
pH	Not Applicable	No information available
Melting/freezing point		No information available
Boiling point/boiling range	Not applicable	No information available
Flash Point	Not Applicable	No information available
Evaporation rate	Not Applicable	No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		No information available
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.37	
Water solubility	Insoluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available
9.2 Other Information		
Volatile organic compounds (VOC) content	None	

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Dust formation. Take precautionary measures against static discharges.

10.5 Incompatible Materials

None known based on information supplied.

10.6 Hazardous Decomposition Products

23-May-2015 - T-16-N - 2 - AGHS - English -

Page 4 / 8

None known based on information supplied.

11. Toxicological Information**11.1 Acute toxicity**

Numerical measures of toxicity: Product Information

LD50 Oral: > 16,000 mg/kg (rat)	LD50 Dermal: > 23,000 mg/kg (rat)
------------------------------------	--------------------------------------

Numerical measures of toxicity: Component Information

11.2 Information on toxicological effects**Skin corrosion/irritation****Product Information**

- Not a dermal irritant
- Component Information
- No information available

Eye damage/irritation**Product Information**

- Dust contact with the eyes can lead to mechanical irritation
- Component Information
- No information available

Respiratory or skin sensitization**Product Information**

- No information available
- Component Information
- No information available

Germ Cell Mutagenicity**Product Information**

- No information available
- Component Information
- No information available

Carcinogenicity

- This product contains <0.1% free formaldehyde and may be capable of outgassing formaldehyde at levels in excess of OSHA's Action Level under some conditions of use. Formaldehyde is a known cancer hazard. Long term exposure may result in dermatitis or respiratory sensitization for sensitive individuals.

Reproductive toxicity**Product Information**

- No information available
- Component Information
- No information available

STOT - single exposure

No information available

STOT - repeated exposure

- No known effect

Other adverse effects**Target Organs**

- No information available
- Product Information
- No information available
- Component Information
- No information available

Aspiration hazard**Product Information**

- No information available
- Component Information
- No information available

12. Ecological Information**12.1 Toxicity**

No information available

Ecotoxicity

< 1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects**12.2 Persistence and degradability**

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

14. Transport Information

DOT	Not regulated
MEX	Not regulated
MDG	Not regulated
IATA	Not regulated

15. Regulatory Information**15.1 International Inventories**

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL - Canadian Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
 PICCS - Philippine Inventory of Chemicals and Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECS - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances
 NZIC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Formaldehyde - 52-00-0	Carcinogen

16. Other information

NFPA	Health Hazard 0	Flammability -	Instability -	Physical and chemical hazards -
HMS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)
 Ceiling (C)
 DOT (Department of Transportation)
 EPA (Environmental Protection Agency)
 IARC (International Agency for Research on Cancer)
 International Air Transport Association (IATA)
 International Maritime Dangerous Goods (IMDG)
 NIOSH (National Institute for Occupational Safety and Health)
 NTP (National Toxicology Program)
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 PEL (Permissible Exposure Limit)
 Reportable Quantity (RQ)
 Skin designation (S)
 STEL (Short Term Exposure Limit)
 TLV® (Threshold Limit Value)

TWA (time-weighted average)

Prepared By: DeyGlo Color Corp.
 Regulatory Affairs/Product Safety
 Revision Date: 23-May-2015

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET


 Revision Date 23-May-2015
Version 2

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

 Product name Blaze Orange™ Pigment
Product code GT-15-N

1.2 Relevant identified uses of the substance or mixture and uses advised against

 Recommended Use Pigment
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

 Supplier DayGlo Color Corp.
4515 St. Clair Avenue
Cleveland, OH 44103
(216) 391-7070
+1 216-391-7070 (outside the US) This telephone number is available during office hours only.

E-mail Address ehs@dayglo.com

1.4 Emergency telephone number

 Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

2.2 Label elements

This product is not classified.

2.3 Other Hazards - Hazards not otherwise classified (HNOCL)

Not Applicable

2.4 Other information

Not Applicable

23-May-2015 - GT-15-N - 2 - AGHS - English -

Page 1 / 8

SAFETY DATA SHEET


 Revision Date 23-May-2015
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Not Applicable

2.4 Other information

Not Applicable

23-May-2015 - GT-15-N - 2 - AGHS - English -

Page 1 / 8

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2.4 Other information

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23-May-2015 - GT-15-N - 2 - AGHS - English -

Page 1 / 8

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Not Applicable

2.4 Other information

Not Applicable

23-May-2015 - GT-15-N - 2 - AGHS - English -

Page 1 / 8

SAFETY DATA SHEET



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2.3 Other Hazards, Hazards not otherwise classified (HNOCL)
Not Applicable

2.4 Other information
Not Applicable

SAFETY DATA SHEET



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Not Applicable

2.4 Other information
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SAFETY DATA SHEET



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2.2. Label elements

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2.3 Other Hazards, Hazards not otherwise classified (HNOCL)
Not Applicable

2.4 Other information
Not Applicable

SAFETY DATA SHEET



Revision Date 23-May-2015
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2. Hazards identification

2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

2.2. Label elements

This product is not classified.

2.3 Other Hazards, Hazards not otherwise classified (HNOCL)
Not Applicable

2.4 Other information
Not Applicable

SAFETY DATA SHEET



Revision Date 23-May-2015
Version 2

1. Identification of the substance/mixture and of the company/undertaking

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Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

2.2. Label elements

This product is not classified.

2.3 Other Hazards - Hazards not otherwise classified (HNOC)
Not Applicable

2.4 Other information
Not Applicable



SAFETY DATA SHEET

Revision Date 23-May-2015
Version 2

T-16 - Arc Yellow™ Pigment

Revision Date 23-May-2015

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product name Arc Yellow™ Pigment
Product code T-16

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Pigment
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier DayGlo Color Corp.
4515 St. Clair Avenue
Cleveland, OH 44103
(216) 391-7070
+1 216-391-7070 (outside the US) This telephone number is available during office hours only.

E-mail Address ehs@dayglo.com

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

2.2 Label elements

This product is not classified.

2.3 Other Hazards - Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other Information

Not Applicable

23-May-2015 - T-16 - 2 - AGHS - English -

Page 1 / 8

3. Composition/Information on Ingredients

Substance

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS No	Weight %
Triethanolamine	102-71-6	< 1
* The exact percentage (concentration) of composition has been withheld as a trade secret.		

4. First aid measures

4.1 Description of first-aid measures

General advice No information available.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin contact Immediate medical attention is not required. Wash off with soap and water.

Inhalation Immediate medical attention is not required. Move to fresh air.

Ingestion Do NOT induce vomiting. Drink plenty of water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Recommendations for immediate medical care and/or special treatment

Notes to physician Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None.

5.2 Specific hazards arising from the substance or mixture

Special Hazard None known based on information supplied

Hazardous Combustion Products Carbon oxides, Nitrogen oxides (NOx), Oxides of sulfur.

Explosion Data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

23-May-2015 - T-16 - 2 - AGHS - English -

Page 2 / 8

T-16 - Arc Yellow™ Pigment

Revision Date 23-May-2015

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment.

6.2 Environmental precautions

Dust deposits should not be allowed to accumulate on surfaces as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., cleaning dusty surfaces with compressed air). Nonsparking tools should be used. Prevent product from entering drains. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Prevent dust cloud. Cover powder spill with plastic sheet or tarp to minimize spreading.

Methods for cleaning up Avoid dust formation. Take precautionary measures against static discharges. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Use personal protective equipment. Take up mechanically and collect in suitable container for disposal. Prevent product from entering drains. Keep in suitable and closed containers for disposal.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Avoid dust formation. Take precautionary measures against static discharges. Fine dust dispersed in air may ignite. Wear personal protective equipment.

Hygiene measure Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place.

Materials to Avoid No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Occupational Exposure Limits (OEL)

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
Triethanolamine 102-71-6	TWA: 5 mg/m ³	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 0.5 ppm TWA: 3.1 mg/m ³

8.2 Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and body protection Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

Respiratory protection If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. NIOSH/MSHA approved respiratory protection should be worn if exposure is anticipated.

23-May-2015 - T-16 - 2 - AGHS - English -

Page 3 / 8

T-16 - Arc Yellow™ Pigment

Revision Date 23-May-2015

Hygiene measures See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	Value	Remarks - Methods
Physical state	Solid	
Appearance	Powder	
Color	Yellow-orange	
Odor	Pungent	
Odor Threshold	No information available	
pH	Not Applicable	
Melting/freezing point		No information available
Boiling point/botling range	Not applicable	No information available
Flash Point	Not Applicable	No information available
Evaporation rate	Not Applicable	No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		No information available
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure	Not Applicable	
Vapor density		No information available
Specific Gravity	1.37	
Water solubility	Insoluble in water	
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic		No information available
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other Information
Volatile organic compounds (VOC) None content

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

Dust formation. Take precautionary measures against static discharges.

10.5 Incompatible Materials

None known based on information supplied.

23-May-2015 - T-16 - 2 - AGHS - English -

Page 4 / 8

10.8 Hazardous Decomposition Products

None known based on information supplied.

11. Toxicological information**11.1 Acute toxicity**

Numerical measures of toxicity: Product information

LD50 Oral: > 18,000 mg/kg (rat)	LD50 Dermal: > 23,000 mg/kg (rat)
------------------------------------	--------------------------------------

Numerical measures of toxicity: Component information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Triethanolamine 102-71-6	4190 mg/kg (Rat)	> 20 mL/kg (Rabbit)	-

11.2 Information on toxicological effects**Skin corrosion/irritation**

Product Information
 * Not a dermal irritant
 Component Information
 * No information available

Eye damage/irritation

Product Information
 * Dust contact with the eyes can lead to mechanical irritation
 Component Information
 * No information available

Respiratory or skin sensitization

Product Information
 * No information available
 Component Information
 * No information available

Germ Cell Mutagenicity

Product Information
 * No information available
 Component Information
 * No information available

Carcinogenicity

* This product contains <0.1% free formaldehyde and may be capable of outgassing formaldehyde at levels in excess of OSHA's Action Level under some conditions of use. Formaldehyde is a known cancer hazard. Long term exposure may result in dermatitis or respiratory sensitization for sensitive individuals.

Reproductive toxicity

Product Information
 * No information available
 Component Information
 * No information available

STOT - single exposure

No information available

STOT - repeated exposure

* No known effect

Other adverse effects

Target Organs
 * No information available
 Product Information
 * No information available
 Component Information
 * No information available

Aspiration hazard

Product Information
 * No information available
 Component Information
 * No information available

12. Ecological Information**12.1 Toxicity**

Ecotoxicity: No information available

< 1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Triethanolamine 102-71-6	EC50: 72 h Diatoms subspiculus 216 mg/L EC50: 96 h Desmodesmus subspiculus 189 mg/L	LC50: 96 h Pimephales promelas 10000 - 13000 mg/L flow-through LC50: 96 h Pimephales promelas 1000 mg/L static LC50: 96 h Lepomis macrochirus 450 - 1000 mg/L static	-

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
Triethanolamine 102-71-6	-2.53

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations**13.1 Waste Disposal Guidance**

Dispose of in accordance with federal, state, and local regulations.

14. Transport information

DOT	Not regulated
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information**15.1 International inventories**

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECS	Complies
KECL	Complies
PIPCS	Complies
AICS	Complies
NZIoC	-

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL - Canadian Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
 PIPCS - Philippines Inventory of Chemicals and Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECS - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PIPCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances
 NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. Federal Regulations

SARA 313
 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

15.3 Pesticide information

Not applicable

15.4 U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Formaldehyde - 50-00-0	Carcinogen

16. Other information

NFPA	Health Hazard 0	Flammability -	Instability -	Physical and chemical hazards -
HMS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)
 Ceiling (C)
 DOT (Department of Transportation)
 EPA (Environmental Protection Agency)
 IARC (International Agency for Research on Cancer)
 International Air Transport Association (IATA)
 International Maritime Dangerous Goods (IMDG)
 NIOSH (National Institute for Occupational Safety and Health)
 NTP (National Toxicology Program)
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 PEL (Permissible Exposure Limit)
 Reportable Quantity (RQ)
 Skin designation (S)
 STEL (Short Term Exposure Limit)
 TLVB (Threshold Limit Value)
 TWA (time-weighted average)

Prepared By DayGlo Color Corp.
 Regulatory Affairs/Product Safety
 Revision Date 23-May-2015

Revision Date
 Revision Note
 No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

REACTINT® BLUE X17AB

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003324 Date of last issue: 2015/08/08 Date of first issue: 2014/01/21

SECTION 1. IDENTIFICATION

Product name : REACTINT® BLUE X17AB
00000003000003324

Product code : 00000003000003324

Manufacturer or supplier's details
Company name of supplier : Milliken & Company

Address : 920 Milliken Rd
Spartanburg SC 29303

Telephone : +1-864-503-1940 (M-F, 8-5 EST)

E-mail address : sds@milliken.com

Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300,
CHEMTREC WORLD: 1-703-927-3887.

Recommended use of the chemical and restrictions on use
Recommended use : Colouring agent

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Not a hazardous substance or mixture.

GHS Label element
Not a hazardous substance or mixture.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation

Chemical nature : Colour reagent

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Quinizarin	81-64-1	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air in case of accidental inhalation of dust or

1/7

SAFETY DATA SHEET

REACTINT® BLUE X17AB

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003324 Date of last issue: 2015/08/08 Date of first issue: 2014/01/21

fumes from overheating or combustion.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Standard procedure for chemical fires.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8.
No special handling advice required.

Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

2/7

SAFETY DATA SHEET

REACTINT® BLUE X17AB

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003324 Date of last issue: 2015/08/08 Date of first issue: 2014/01/21

Hazardous components without workplace control parameters

Components	CAS-No.
Quinizarin	81-64-1

Personal protective equipment
Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : dark blue

pH : 6 - 8

Melting point/freezing point : < 0 °C

Boiling point/boiling range : > 100 °C

Flash point : > 83.3 °C
Method: Cleveland open cup

Vapour pressure : < 0.013 hPa (25 °C)

Relative density : 1.1

Viscosity
Viscosity, dynamic : 2,215 mPa.s

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No hazards to be specially mentioned.

Conditions to avoid : no data available

3/7

SAFETY DATA SHEET

REACTINT® BLUE X17AB

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003324 Date of last issue: 2015/08/08 Date of first issue: 2014/01/21

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Product:
Acute oral toxicity : LD50 (rat): > 5,000 mg/kg
Acute inhalation toxicity : Acute toxicity estimate: > 10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Components:
Quinizarin:
Acute oral toxicity : LD50 (rat): > 2,000 mg/kg
Acute inhalation toxicity : LC50 (rat): > 1 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Skin corrosion/irritation

Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

Serious eye damage/eye irritation

Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Components:

Quinizarin:
Species: rabbit
Result: Irritating

Respiratory or skin sensitisation

Product:
Remarks: no data available

Carcinogenicity

IARC
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

4/7

SAFETY DATA SHEET

REACTINT® BLUE X17AB

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 0000000300003324 Date of last issue: 2015/06/08 Date of first issue: 2014/01/21

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Further information

Product:

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Quintarzin:

Toxicity to algae : EC50 (*Daphnia magna* subspicatus (green algae): 0.44 mg/l
Exposure time: 72 h)

Persistence and degradability

Product:

Biochemical Oxygen Demand (BOD) : 64000 ppm

Chemical Oxygen Demand (COD) : 639000 ppm

Components:

Quintarzin:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Components:

Quintarzin:

Partition coefficient: n-octanol/water : log Pow: 2.34

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological info- : There is no data available for this product.

5/7

SAFETY DATA SHEET

REACTINT® BLUE X17AB

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 0000000300003324 Date of last issue: 2015/06/08 Date of first issue: 2014/01/21

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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302

: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

6/7

SAFETY DATA SHEET

REACTINT® BLUE X17AB

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 0000000300003324 Date of last issue: 2015/06/08 Date of first issue: 2014/01/21

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(f) for Accidental Release Prevention (40 CFR 88.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

California Prop 65

: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further Information

Revision Date : 2015/11/25

Please Note: As each customer's use of our product may be different, information we provide, including without limitation, any regulatory information, recommendations, test results, samples, certificates/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

US / EN

7/7

SAFETY DATA SHEET

REACTINT® YELLOW X15



Version 1.4 Revision Date: 2015/12/07 MSDS Number: 00000003000003326 Date of last issue: 2015/11/25 Date of first issue: 2014/01/21

SECTION 1. IDENTIFICATION

Product name : REACTINT® YELLOW X15
00000003000003326

Product code : 00000003000003326

Manufacturer or supplier's details
Company name of supplier : Miliken & Company
Address : 820 Miliken Rd
Spartanburg SC 29303
Telephone : +1-864-503-1840 (M-F, 8-5 EST)
E-mail address : sds@miliken.com
Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300, CHEMTREC WORLD: 1-703-527-3887.

Recommended use of the chemical and restrictions on use
Recommended use : Colouring agent

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Chronic aquatic toxicity : Category 3

GHS Label element
Hazard statements : H412 Harmful to aquatic life with long lasting effects.
Precautionary statements : Prevention:
P273 Avoid release to the environment.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation
Chemical nature : Colour reagent

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Aromatic amino polyol-Yellow	Not Assigned	>= 70 - < 90

1 / 7

SAFETY DATA SHEET

REACTINT® YELLOW X15



Version 1.4 Revision Date: 2015/12/07 MSDS Number: 00000003000003326 Date of last issue: 2015/11/25 Date of first issue: 2014/01/21

application area.

Conditions for safe storage : Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Components	CAS-No.
Aromatic amino polyol-Yellow	Not Assigned

Personal protective equipment
Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Safety glasses
Skin and body protection : Protective suit
Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Colour : dark yellow
Melting point/freezing point : < 0 °C
Boiling point/boiling range : > 200 °C
Flash point : 284 °C
Method: Cleveland open cup
Relative vapour density : 1
Relative density : 1.1

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

3 / 7

SAFETY DATA SHEET

REACTINT® YELLOW X15



Version 1.4 Revision Date: 2015/12/07 MSDS Number: 00000003000003326 Date of last issue: 2015/11/25 Date of first issue: 2014/01/21

SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of eye contact : Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Further information : Collected contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the

2 / 7

SAFETY DATA SHEET

REACTINT® YELLOW X15



Version 1.4 Revision Date: 2015/12/07 MSDS Number: 00000003000003326 Date of last issue: 2015/11/25 Date of first issue: 2014/01/21

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Stable under recommended storage conditions.
No hazards to be specially mentioned.

Conditions to avoid : no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Product:
Acute oral toxicity : LD50 (rat): > 5,000 mg/kg

Components:
Aromatic amino polyol-Yellow:
Acute oral toxicity : LD50 Oral (rat): > 5,000 mg/kg

Skin corrosion/irritation
Not classified based on available information.

Serious eye damage/eye irritation
Not classified based on available information.

Respiratory or skin sensitisation
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Product:
Genotoxicity in vitro : Test Type: Ames test
Result: negative

Components:
Aromatic amino polyol-Yellow:
Genotoxicity in vitro : Test Type: Ames test
Result: negative

Carcinogenicity
Not classified based on available information.
IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

4 / 7

SAFETY DATA SHEET

REACTINT® YELLOW X15

Milliken

Version 1.4 Revision Date: 2015/12/07 MSDS Number: 00000003000003326 Date of last issue: 2015/11/25 Date of first issue: 2014/01/21

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment, Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

Additional ecological information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water

5 / 7

SAFETY DATA SHEET

REACTINT® YELLOW X15

Milliken

Version 1.4 Revision Date: 2015/12/07 MSDS Number: 00000003000003326 Date of last issue: 2015/11/25 Date of first issue: 2014/01/21

courses or the soil.

SECTION 14. TRANSPORT INFORMATION

International Regulation**UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(f) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM/ Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

6 / 7

SAFETY DATA SHEET

REACTINT® YELLOW X15

Milliken

Version 1.4 Revision Date: 2015/12/07 MSDS Number: 00000003000003326 Date of last issue: 2015/11/25 Date of first issue: 2014/01/21

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 2015/12/07

Please Note: As each customer's use of our product may be different, information we provide, including without limitation, any regulatory information, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

US / EN

7 / 7

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/06 Date of first issue: 2014/01/21

SECTION 1. IDENTIFICATION

Product name : REACTINT® RED X64
00000003000003331

Product code : 00000003000003331

Manufacturer or supplier's details
Company name of supplier : Milliken & Company

Address : 820 Milliken Rd
Spartanburg SC 29303

Telephone : +1-864-503-1940 (M-F, 8-5 EST)

E-mail address : scs@milliken.com

Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300, CHEMTREC WORLD: 1-703-627-3687.


Recommended use of the chemical and restrictions on use
Recommended use : Colouring agent

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Eye irritation : Category 2A

Acute aquatic toxicity : Category 3

Chronic aquatic toxicity : Category 3

GHS Label element
Hazard pictograms : 

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : Prevention:
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/face protection.
Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

1 / 9

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/06 Date of first issue: 2014/01/21

to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Aromatic amino polyol-Rad	Not Assigned	>= 30 - < 50

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This

2 / 9

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/06 Date of first issue: 2014/01/21

must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.

Environmental precautions : Try to prevent the material from entering drains or water courses.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

Hand protection
Remarks : Polyvinyl alcohol or nitrile-butyl-rubber gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves clean them with soap and water.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

3 / 9

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/06 Date of first issue: 2014/01/21

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : dark red

Odour : sweet

Melting point/freezing point : < 0 °C

Boiling point/boiling range : > 100 °C

Flash point : 240 °C
Method: Cleveland open cup

Relative density : 1,1

Solubility(ies)
Water solubility : partly miscible

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Stable under recommended storage conditions.
No decomposition if used as directed.

Conditions to avoid : no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Skin corrosion/irritation
Product:
Species: rabbit
Assessment: No skin irritation
Result: No skin irritator

4 / 9

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/08 Date of first issue: 2014/01/21

Remarks: Aromatic amino polyol-Red

Remarks: May cause skin irritation in susceptible persons.

Components:Aromatic amino polyol-Red:
Species: rabbit
Assessment: No skin irritation
Result: No skin irritation**Serious eye damage/eye irritation****Product:**Species: rabbit
Result: Irritating
Assessment: Irritating to eyes.
Remarks: Aromatic amino polyol-Red

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:Aromatic amino polyol-Red:
Species: rabbit
Result: Eye irritation
Assessment: Irritating to eyes.**Respiratory or skin sensitisation****Product:**Test Type: Maximisation Test
Assessment: Does not cause skin sensitisation.
Result: Does not cause skin sensitisation.

Remarks: no data available

Components:Aromatic amino polyol-Red:
Test Type: Maximisation Test
Assessment: Does not cause skin sensitisation.**Germ cell mutagenicity****Product:**Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Result: Positive results were obtained in some in vitro tests.
Remarks: Aromatic amino polyol-Red: Test Type: Ames test
Result: negative
Remarks: Aromatic amino polyol-Red

Genotoxicity in vivo : Test Type: In vivo micronucleus test

5 / 8

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/08 Date of first issue: 2014/01/21

Result: negative

Remarks: Aromatic amino polyol-Red

Components:

Aromatic amino polyol-Red:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Result: Positive results were obtained in some in vitro tests.: Test Type: Ames test
Result: negative

Genotoxicity in vivo

: Test Type: In vivo micronucleus test
Result: negative**Carcinogenicity****IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Repeated dose toxicity**Product:**Species: rat
NOAEL: 15 mg/kg
Application Route: Oral
Exposure time: 28 h
Remarks: Subacute toxicity
Aromatic amino polyol-Red**Components:**

Aromatic amino polyol-Red:

Species: rat
NOAEL: 15 mg/kg
Application Route: Oral
Exposure time: 28 Days**Further information****Product:**

Remarks: no data available

6 / 8

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/08 Date of first issue: 2014/01/21

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Components:**Aromatic amino polyol-Red:
Bioaccumulation : Species: Cyprinus carpio (Carp)
Exposure time: 96 d
Concentration: 10.2 mg/l**Mobility in soil**

No data available

Other adverse effects**Product:**Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone - CAA Section 602 Class I
Substances
Remarks: This product neither contains, nor was
manufactured with a Class I or Class II ODS as defined by the
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A +
B).Additional ecological information : An environmental hazard cannot be excluded in the event of
unprofessional handling or disposal.
Harmful to aquatic organisms, may cause long-term adverse
effects in the aquatic environment.**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**Waste from residues : The product should not be allowed to enter drains, water
courses or the soil.
Do not contaminate ponds, waterways or ditches with
chemical or used container.
Offer surplus and non-recyclable solutions to a licensed
disposal company.**Contaminated packaging**: Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

7 / 8

SAFETY DATA SHEET

REACTINT® RED X64

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003331 Date of last issue: 2015/06/08 Date of first issue: 2014/01/21

SECTION 14. TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Component	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ammonium Carbonate	506-87-6	5000	7

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : SARA 302. No chemicals in this material are subject to the
reporting requirements of SARA Title III, Section 302.SARA 313 : SARA 313. This material does not contain any chemical
components with known CAS numbers that exceed the
threshold (De Minimis) reporting levels established by SARA
Title III, Section 313.**Clean Air Act**This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by
the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean
Air Act Section 12 (40 CFR 81).This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 (b)(1) for
Accidental Release Prevention (40 CFR 86, 130, Subpart F).The following chemical(s) are listed under the U.S. Clean Air Act Section 111 (b)(1) SOCMCI
Intermediate or Final VOCs (40 CFR 80.469):
2-Ethylhexanol 104-76-7 0.1 %
UREA 57-13-6 0.1 %

8 / 8

SAFETY DATA SHEET

REACTINT® RED X64

Miliken

Version: 1.3 Revision Date: 2015/11/25 MSDS Number: 0000000300003331 Date of last issue: 2015/06/08
Date of first issue: 2014/01/21

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 118.4A:

Ammonium Carbonate 506-87-6 0.1 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Ammonium Carbonate 506-87-6 0.1 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further Information

Revision Date : 2015/11/25

Please Note: As each customer's use of our product may be different, information we provide, including without limitation, any regulatory information, recommendations, test results, samples, cans/labels/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.miliken.com/hazmat (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

US / EN

SAFETY DATA SHEET

REACTINT® ORANGE X96

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003317 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

SECTION 1. IDENTIFICATION

Product name : REACTINT® ORANGE X96
00000003000003317

Product code : 00000003000003317

Manufacturer or supplier's details
Company name of supplier : Milliken & Company
Address : 320 Milliken Rd
Spartanburg SC 29303
Telephone : +1-864-603-1940 (M-F, 9-6 EST)
E-mail address : sds@milliken.com
Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300, CHEMTREC WORLD: 1-703-527-3687.

Recommended use of the chemical and restrictions on use
Recommended use : Colouring agent

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Chronic aquatic toxicity : Category 3

GHS Label element
Hazard statements : H412 Harmful to aquatic life with long lasting effects.
Precautionary statements : Prevention:
P273 Avoid release to the environment.
Disposal:
P001 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation
Chemical nature : Colour reagent

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Aromatic amino polyol-Orange	Not Assigned	>= 50 - < 70

1 / 7

SAFETY DATA SHEET

REACTINT® ORANGE X96

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003317 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

[4,4'-Diaminodiphenyl Sulphone] | 80-08-0 | >= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

2 / 7

SAFETY DATA SHEET

REACTINT® ORANGE X96

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003317 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8. Dispose of rinse water in accordance with local and national regulations.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Personal protective equipment
Hand protection
Remarks : Polyvinyl alcohol or nitrile-butyl-rubber gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves clean them with soap and water.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Colour : dark orange
Odour : sweet
Boiling point/boiling range : > 100 °C
Flash point : 270 °C
Method: Cleveland open cup
Vapour pressure : < 1,013,25 hPa (25 °C)
Relative density : 1.1

SECTION 10. STABILITY AND REACTIVITY

3 / 7

SAFETY DATA SHEET

REACTINT® ORANGE X96

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 00000003000003317 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Stable under recommended storage conditions. No decomposition if used as directed.

Conditions to avoid : no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Product:
Acute oral toxicity : LD50 (rat): > 5,000 mg/kg

Components:
Aromatic amino polyol-Orange:
Acute oral toxicity : LD50 (rat, male and female): > 5,000 mg/kg

Skin corrosion/irritation
Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

Serious eye damage/eye irritation
Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Respiratory or skin sensitisation
Product:
Remarks: no data available

Genes cell mutagenicity
Product:
Genotoxicity in vitro : Test Type: Ames test
Result: negative
Test Type: Chromosome aberration test in vitro
Result: negative

Components:
Aromatic amino polyol-Orange:
Genotoxicity in vitro : Test Type: Ames test
Species: Salmonella typhimurium

4 / 7

SAFETY DATA SHEET

REACTINT® ORANGE X96

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 0000000300003317 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

Result: negative

Carcinogenicity

IARC

Group 3: Not classifiable as to its carcinogenicity to humans

4,4'-Diaminodiphenyl Sulphone 80-08-0

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Further information

Product:

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Components:

4,4'-Diaminodiphenyl Sulphone:
Partition coefficient: n-octanol/water : log Pow: 0.97

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment, Part 82, Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic organisms, may cause long-term adverse

5 / 7

SAFETY DATA SHEET

REACTINT® ORANGE X96

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 0000000300003317 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues

: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Component	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ammonium Carbonate	506-87-6	6000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards

: No SARA Hazards

6 / 7

SAFETY DATA SHEET

REACTINT® ORANGE X96

Milliken

Version 1.3 Revision Date: 2015/11/25 MSDS Number: 0000000300003317 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

SARA 302

: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOGMI

Intermediate or Final VOCs (40 CFR 60.486):

2-Ethylhexanol 104-76-7 0.1 %
UREA 57-13-0 0.1 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. Clean Water Act, Section 311, Table 116.4k:

Ammonium Carbonate 506-87-6 0.1 %

The following Hazardous Chemicals are listed under the U.S. Clean Water Act, Section 311, Table 117.3:

Ammonium Carbonate 506-87-6 0.1 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop 65

: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further information

Revision Date

: 2015/11/25

Please Note: As each customer's use of our product may be different, information we provide, including without limitation, any regulatory information, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

US / EN

7 / 7

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 0000000300003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

SECTION 1. IDENTIFICATION

Product name : REACTINT® VIOLET X80LT
0000000300003334

Product code : 0000000300003334

Manufacturer or supplier's details
Company name of supplier : Milliken & Company

Address : 920 Milliken Rd
Spartanburg SC 29303

Telephone : +1-864-503-1940 (M-F, 8-5 EST)

E-mail address : sds@milliken.com


Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300,
CHEMTREC WORLD: 1-703-527-3867.

Recommended use of the chemical and restrictions on use
Recommended use : Colouring agent

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Acute aquatic toxicity : Category 2

Chronic aquatic toxicity : Category 2

GHS Label element
Hazard pictograms : 

Hazard statements : H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:
P273 Avoid release to the environment.
Response:
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

1 / 9

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 0000000300003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation

Chemical nature : Colour reagent

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Aromatic amino polyol-Violet	Not Assigned	>= 90 <- 100

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eyes.
Keep eye wide open while rinsing.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Standard procedure for chemical fires.

Special protective equipment for firefighters : In the event of fire, wear self contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

2 / 9

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 0000000300003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8.
No special handling advice required.

Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection
Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practices.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : dark violet

Melting point/freezing point : < 0 °C

Boiling point/boiling range : > 100 °C

Flash point : 280 °C

Relative vapour density : 1

Relative density : 1.1

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

3 / 9

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 0000000300003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No hazards to be specially mentioned.

Conditions to avoid : no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
Acute oral toxicity : LD50 (rat): 4,200 mg/kg
Remarks: Aromatic amino polyol-Violet

Acute dermal toxicity : LD50 (rat): > 2,000 mg/kg
Remarks: Aromatic amino polyol-Violet

Components:

Aromatic amino polyol-Violet:
Acute oral toxicity : LD50 (rat): 4,200 mg/kg

Acute dermal toxicity : LD50 (rat): > 2,000 mg/kg

Skin corrosion/irritation

Product:
Species: rabbit
Method: Draize Test
Result: No skin irritation
Remarks: Aromatic amino polyol-Violet

Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

Components:

Aromatic amino polyol-Violet:
Species: rabbit
Method: Draize Test
Result: No skin irritation

Serious eye damage/eye irritation

Product:
Species: rabbit
Result: No eye irritation
Remarks: Aromatic amino polyol-Violet

Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

4 / 9

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

Components:

Aromatic amino polyol-Violet:
Species: rabbit
Result: No eye irritation

Respiratory or skin sensitisation**Product:**

Species: guinea pig
Result: This material is considered to have weak sensitizing properties in this test applying the rating of allergenicity described by Klingman A.M (1996)

Components:

Aromatic amino polyol-Violet:
Species: guinea pig
Remarks: This material is considered to have weak sensitizing properties in this test applying the rating of allergenicity described by Klingman A.M (1968)

Germ cell mutagenicity**Product:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Result: This material was found to be clastogenic to CHL cells in vitro
Remarks: Aromatic amino polyol-Violet

Genotoxicity in vivo : Test Type: in vivo micronucleus test
Result: negative
Remarks: Aromatic amino polyol-Violet

Components:

Aromatic amino polyol-Violet:
Genotoxicity in vitro : Test Type: Micronucleus test
Result: negative

Carcinogenicity

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Repeated dose toxicity**Product:**

Species: rat

7/9

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

NOAEL: 50 mg/kg

Application Route: Ingestion

Exposure time: 28 d

Remarks: Aromatic amino polyol-Violet

A no observed effect level (NOEL) of 50 mg/kg/day was established, although effects at 200 mg/kg/day were limited to excessive salivation which may not be considered evidence of a toxic reaction to treatment

Components:**Aromatic amino polyol-Violet:**

Species: rat

NOAEL: 50 mg/kg

Application Route: Oral

Exposure time: 28 d

Method: OECD Test Guideline 407

Remarks: A no observed effect level (NOEL) of 50 mg/kg/day was established, although effects at 200 mg/kg/day were limited to excessive salivation which may not be considered evidence of a toxic reaction to treatment

Further information**Product:**

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity**Product:**

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 9.3 mg/l
Exposure time: 96 h
Remarks: Aromatic amino polyol

LC50 (Cyprinus carpio (Carp)): 3.87 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 450 mg/l
Exposure time: 48 h
Remarks: Aromatic amino polyol-Violet

Components:**Aromatic amino polyol-Violet:**

Toxicity to fish :

LC50 (Cyprinus carpio (Carp)): 9.3 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 450 mg/l
Exposure time: 48 h

Persistence and degradability

No data available

6/9

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

: Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulation**IATA-DGR**

UNID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (Polyoxyalkylene colorant)

Class : 9

Packing group : III

Labels : Miscellaneous Dangerous Goods

Packing instruction (cargo aircraft) : 964

Packing instruction (passenger aircraft) : 964

IMDG-Code

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyoxyalkylene colorant)

Class : 9

Packing group : III

Labels : 9

7/9

SAFETY DATA SHEET

REACTINT® VIOLET X80LT

Milliken

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003334 Date of last issue: 2015/06/04 Date of first issue: 2014/01/21

EmS Code

: F-A, S-F

Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

UNID/NA number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.

(Polyoxyalkylene colorant)

Class : 9

Packing group : III

Labels : CLASS 9

ERG Code : 171

Marine pollutant : yes/(Polyoxyalkylene colorant)

SECTION 15. REGULATORY INFORMATION

EPRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lb)	Calculated product RQ (lb)
Phosphoric Acid	7664-36-2	5000	-
Ammonium Carbonate	506-87-6	5000	-

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards

: No SARA Hazards

SARA 302

: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM/ Intermediate or Final VOC's (40 CFR 60.489):

UREA	57-13-6	0.1 %
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6/9

SAFETY DATA SHEET

Milliken

REACTINT® VIOLET X80LT

Version 1.2 Revision Date: 2015/11/25 MSDS Number: 00000003000003334 Date of last issue: 2015/06/04
Date of first issue: 2014/01/21

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Phosphoric Acid	7664-39-2	0.1 %
Ammonium Carbonate	506-87-8	0.1 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Phosphoric Acid	7664-39-2	0.1 %
Ammonium Carbonate	506-87-8	0.1 %

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further Information

Revision Date : 2015/11/25

Please Note: As each customer's use of our product may be different, information we provide, including without limitation, any regulatory information, recommendations, test results, samples, or re-labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

US / EN

SAFETY DATA SHEET

REACTINT® BLACK X95AB

Milliken

Version 1.3 Revision Date: 2015/12/10 MSDS Number: 00000003000003714 Date of last issue: 2015/07/27 Date of first issue: 2014/11/04

SECTION 1. IDENTIFICATION

Product name : REACTINT® BLACK X95AB
00000003000003714

Product code : 00000003000003714

Manufacturer or supplier's details

Company name of supplier : Milliken & Company

Address : 900 Milliken Rd
Spartanburg SC 29303

Telephone : +1-864-503-1940 (M-F, 6-5 EST)

E-mail address : lsd@milliken.com

Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300, CHEMTREC WORLD: 1-703-627-3887.

Recommended use of the chemical and restrictions on use
Recommended use : Colouring agent

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Chronic aquatic toxicity : Category 3

GHS Label element

Hazard statements : H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : Prevention:
P273 Avoid release to the environment.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation

Hazardous components		
Chemical Name	CAS-No.	Concentration (%)
Aromatic amino polyol-Purple	Not Assigned	>= 30 -< 50
Aromatic amino polyol-Yellow	Not Assigned	>= 30 -< 50

1 / 7

SAFETY DATA SHEET

REACTINT® BLACK X95AB

Milliken

Version 1.3 Revision Date: 2015/12/10 MSDS Number: 00000003000003714 Date of last issue: 2015/07/27 Date of first issue: 2014/11/04

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

2 / 7

SAFETY DATA SHEET

REACTINT® BLACK X95AB

Milliken

Version 1.3 Revision Date: 2015/12/10 MSDS Number: 00000003000003714 Date of last issue: 2015/07/27 Date of first issue: 2014/11/04

Advice on safe handling : For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Personal protective equipment

Hand protection

Remarks : Polyvinyl alcohol or nitrile- butyl-rubber gloves The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Before removing gloves clean them with soap and water.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : black

Odour : mild

Flash point : > 175 °C

Solubility(ies)
Water solubility : partly miscible

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Stable under recommended storage conditions.
No decomposition if used as directed.

3 / 7

SAFETY DATA SHEET

REACTINT® BLACK X95AB

Milliken

Version 1.3 Revision Date: 2015/12/10 MSDS Number: 00000003000003714 Date of last issue: 2015/07/27 Date of first issue: 2014/11/04

Conditions to avoid : no data available.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Components:
Aromatic amino polyol-Yellow:
Acute oral toxicity : LD50 Oral (rat): > 5,000 mg/kg

Skin corrosion/irritation
Not classified based on available information.

Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

Serious eye damage/eye irritation
Not classified based on available information.

Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Respiratory or skin sensitisation
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.

Product:
Remarks: no data available.

Germ cell mutagenicity
Not classified based on available information.

Components:
Aromatic amino polyol-Yellow:
Genotoxicity in vitro : Test 7 type: Ames test
Result: negative

Carcinogenicity
Not classified based on available information.

IARC
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

4 / 7

SAFETY DATA SHEET

REACTINT® BLACK X95AB

Milliken

Version 1.3 Revision Date: 2015/12/10 MSDS Number: 00000003000003714 Date of last issue: 2015/07/27 Date of first issue: 2014/11/04

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Further information

Product:
Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects

Product:
Ozone Depletion Potential Regulation: 40 CFR Protection of Environment, Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

5 / 7

SAFETY DATA SHEET

REACTINT® BLACK X95AB

Milliken

Version 1.3 Revision Date: 2015/12/10 MSDS Number: 00000003000003714 Date of last issue: 2015/07/27 Date of first issue: 2014/11/04

Waste from residues : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used containers. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A - B).

6 / 7

SAFETY DATA SHEET

REACTINT® BLACK X95AB

Milliken

Version 1.3 Revision Date: 2015/12/10 MSDS Number: 00000003000003714 Date of last issue: 2015/07/27 Date of first issue: 2014/11/04

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 81).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 66.130, Subpart F).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM/ Intermediate or Final VOC's (40 CFR 60.489):
Ethyl Cyanoacrylate 105-96-6 0.4 %

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 119.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 2015/12/10

Please Note: As each customer's use of our product may be different, information we provide, including without limitation, any regulatory information, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

US / EN

7 / 7

SAFETY DATA SHEET

DispersiTech WHITE 2204

Milliken

Version 1.1 Revision Date: 2015/11/08 MSDS Number: 000000003000009149 Date of last issue: 2015/02/11 Date of first issue: 2015/02/11

SECTION 1. IDENTIFICATION

Product name : DispersiTech WHITE 2204
000000003000009149

Product code : 000000003000009149

Manufacturer or supplier's details

Company name of supplier : Milliken & Company

Address : 920 Milliken Rd.
Spartanburg SC 29303

Telephone : +1-864-503-1940 (M-F, 8-5 EST)

E-mail address : ids@milliken.com

Emergency telephone number : In case of emergency call CHEMTREC US: 1-800-424-9300, CHEMTREC WORLD: 1-703-527-3887.

Recommended use of the chemical and restrictions on use
Recommended use : Colouring agents, pigments

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Carcinogenicity : Category 2

GHS Label element
Hazard pictograms : 

Signal word : Warning

Hazard statements : H351 Suspected of causing cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P305 + P313 IF exposed or concerned: Get medical advice/ attention.
Storage:
P405 Store locked up.
Disposal:

1 / 7

SAFETY DATA SHEET

DispersiTech WHITE 2204

Milliken

Version 1.1 Revision Date: 2015/11/08 MSDS Number: 000000003000009149 Date of last issue: 2015/02/11 Date of first issue: 2015/02/11

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation

Chemical nature : Preparation

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Titanium Dioxide	13463-67-7	>= 50 - < 70
Amorphous Silicon Dioxide	7631-86-9	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.

If swallowed : Clean mouth with water and drink afterwards plenty of water. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information : Standard procedure for chemical fires.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

2 / 7

SAFETY DATA SHEET

DispersiTech WHITE 2204

Milliken

Version 1.1 Revision Date: 2015/11/08 MSDS Number: 000000003000009149 Date of last issue: 2015/02/11 Date of first issue: 2015/02/11

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : For personal protection see section 8. No special handling advice required.

Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Titanium Dioxide	13463-67-7	TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (total dust)	10 mg/m ³	OSHA PG
		TWA	10 mg/m ³ (Titanium dioxide)	ACGIH

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection
Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Viscous

Colour : white

3 / 7

SAFETY DATA SHEET

DispersiTech WHITE 2204

Milliken

Version 1.1 Revision Date: 2015/11/08 MSDS Number: 000000003000009149 Date of last issue: 2015/02/11 Date of first issue: 2015/02/11

Boiling point/boiling range : not determined

Flash point : not determined

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : No hazards to be specially mentioned.

Conditions to avoid : no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Skin corrosion/irritation

Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

Serious eye damage/eye irritation

Product:
Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Respiratory or skin sensitisation

Product:
Remarks: no data available

Carcinogenicity

IARC : Group 2B: Possibly carcinogenic to humans
Titanium Dioxide 13463-67-7

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Further information

Product:

4 / 7

SAFETY DATA SHEET

DispersiTech WHITE 2204

Milliken

Version 1.1 Revision Date: 2015/11/08 MSDS Number: 00000003000009149 Date of last issue: 2015/02/11 Date of first issue: 2015/02/11

Remarks: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

Additional ecological information : There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

: Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

5 / 7

SAFETY DATA SHEET

DispersiTech WHITE 2204

Milliken

Version 1.1 Revision Date: 2015/11/08 MSDS Number: 00000003000009149 Date of last issue: 2015/02/11 Date of first issue: 2015/02/11

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 81).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 86.130, Subpart F).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 (SCM) Intermediate or Final VOC's (40 CFR 86.488).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

6 / 7

SAFETY DATA SHEET

DispersiTech WHITE 2204

Milliken

Version 1.1 Revision Date: 2015/11/08 MSDS Number: 00000003000009149 Date of last issue: 2015/02/11 Date of first issue: 2015/02/11

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 2015/11/08

Please Note: As each customer's use of our product may be different, information we provide, including without limitation, any regulatory information, recommendations, test results, samples, care/instructions/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at www.milliken.com/terms (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

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7 / 7