

**SAFETY DATA SHEET****RED 206C ACETAL**Version Number 1.0  
Revision Date 07/30/2014Page 1 of 15  
Print Date 07/31/2014**SAFETY DATA SHEET****RED 206C ACETAL****Section 1. Identification**

**GHS product identifier** : RED 206C ACETAL  
**Chemical name** : Mixture  
**CAS number** : Mixture  
**Other means of identification** : CC10202343  
**Product type** : solid

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

**Product use** : Industrial applications. Plastics.

**Supplier's details** : **POLYONE CORPORATION**  
33587 Walker Road, Avon Lake, OH 44012  
  
1 (440) 930-1000 or 1 (866) POLYONE

**Emergency telephone number (with hours of operation)** : **CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).**CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

**Section 2. Hazards identification**

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2

**Supplemental label elements** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : None known.

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 2 of 15  
Print Date 07/31/2014

**Hazards not otherwise classified** : None known.

### Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Chemical name** : Mixture  
**Other means of identification** : CC10202343

#### CAS number/other identifiers

Ingredient name	%	CAS number
Poly(dimethylsiloxane)	10 - 30	63148-62-9
Titanium dioxide	5 - 10	13463-67-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 3 of 15  
Print Date 07/31/2014

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Most important symptoms/effects, acute and delayed

##### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Irritating to mouth, throat and stomach.

##### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to

## SAFETY DATA SHEET

**RED 206C ACETAL**

Version Number 1.0  
Revision Date 07/30/2014

Page 4 of 15  
Print Date 07/31/2014

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical or CO<sub>2</sub>.  
**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : If overheated or burnt, the polymer releases formaldehyde. Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 nitrogen oxides  
 halogenated compounds  
 metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the

**SAFETY DATA SHEET****RED 206C ACETAL**

Version Number 1.0  
Revision Date 07/30/2014

Page 5 of 15  
Print Date 07/31/2014

product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**

- Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**Section 7. Handling and storage****Precautions for safe handling**

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a well-ventilated place. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid

## SAFETY DATA SHEET

**RED 206C ACETAL**

Version Number 1.0  
Revision Date 07/30/2014

Page 6 of 15  
Print Date 07/31/2014

environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Titanium dioxide	<p><b>OSHA PEL 1989 (1989-03-01)</b>            PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust</p> <p><b>OSHA PEL (1993-06-30)</b>            PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust</p> <p><b>NIOSH REL (1994-06-01)</b></p> <p><b>ACGIH TLV (1996-05-18)</b>            TLV-TWA: Threshold Limit Value - Time weighted average PEL:            Permissible Exposure Level 10 mg/m3</p>

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 7 of 15  
Print Date 07/31/2014

#### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

#### Appearance

- Physical state** : solid [Pellets.]
- Color** : RED
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Not available.
- Burning time** : Not available.
- Burning rate** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : **Lower:** Not available.  
**Upper:** Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 8 of 15  
Print Date 07/31/2014

<b>Solubility</b>	:	Not available.
<b>Solubility in water</b>	:	Not available.
<b>Partition coefficient: n-octanol/water</b>	:	Not available.
<b>Auto-ignition temperature</b>	:	Not available.
<b>Decomposition temperature</b>	:	Not available.
<b>SADT</b>	:	Not available.
<b>Viscosity</b>	:	<b>Dynamic:</b> Not available. <b>Kinematic:</b> Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	:	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	:	Stable under recommended storage and handling conditions (see Section 7).
<b>Possibility of hazardous reactions</b>	:	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	:	Maintain polymer temperature below 230°C (446°F). Avoid prolonged exposure at or above recommended processing temperature.
<b>Incompatible materials</b>	:	Incompatible with strong oxidizers and with strong acids and bases (decomposes to form formaldehyde). At melt temperatures, acetal resins are incompatible with halogenated polymers such as vinyl (PVC) and any elastomers containing any halogenated polymers. At processing conditions, these materials are mutually destructive and involve rapid degradation. Even small amounts of such contaminants can cause sudden and spontaneous formaldehyde gas formation. Workplace fume well above threshold levels are a likely result. Unsafe pressurization of equipment such as extruder or mold can also result. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of halogenated materials from coming in contact with the acetal. Prevent contamination of virgin or rework resin.
<b>Hazardous decomposition products</b>	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

### Information on toxicological effects

#### Acute toxicity



## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 9 of 15  
Print Date 07/31/2014

**Conclusion/Summary** : Mixture.Not fully tested.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Poly(dimethylsiloxane)	Eyes - Moderate irritant	Rabbit		24 hrs	-
	Skin - Mild irritant	Rabbit		24 hrs	-

**Conclusion/Summary**

**Skin** : Mixture.Not fully tested.  
**Eyes** : Mixture.Not fully tested.  
**Respiratory** : Mixture.Not fully tested.

#### Sensitization

**Conclusion/Summary**

**Skin** : Mixture.Not fully tested.  
**Respiratory** : Mixture.Not fully tested.

#### Mutagenicity

**Conclusion/Summary** : Mixture.Not fully tested.

#### Carcinogenicity

**Conclusion/Summary** : Mixture.Not fully tested.

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium dioxide		2B	

#### Reproductive toxicity

**Conclusion/Summary** : Mixture.Not fully tested.

#### Teratogenicity

**Conclusion/Summary** : Mixture.Not fully tested.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 10 of 15  
Print Date 07/31/2014

Not available.

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : Irritating to mouth, throat and stomach.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

##### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Potential chronic health effects

**Conclusion/Summary** : Mixture. Not fully tested.  
**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 11 of 15  
Print Date 07/31/2014

**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

#### Numerical measures of toxicity

##### Acute toxicity estimates

Not available.

## Section 12. Ecological information

#### Toxicity

Product/ingredient name	Result	Species	Exposure
Poly(dimethylsiloxane)			
	Acute LC50 3.160 mg/l Fresh water	Fish - Channel catfish	96 h
	Acute LC50 37.790 mg/l Fresh water	Fish - Redear sunfish	96 h
	Acute LC50 44.5 mg/l Fresh water	Aquatic invertebrates. Water flea	48 h
RED 206C ACETAL			
<b>Remarks - Acute - Aquatic invertebrates.:</b>	Chemicals are not readily available as they are bound within the polymer matrix.		

**Conclusion/Summary** : Chemicals are not readily available as they are bound within the polymer matrix.

#### Persistence and degradability

**Conclusion/Summary** : Chemicals are not readily available as they are bound within the polymer matrix.

**Conclusion/Summary** : Chemicals are not readily available as they are bound within the polymer matrix.

#### Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		352.00	low

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 12 of 15  
Print Date 07/31/2014

#### Mobility in soil

- Soil/water partition coefficient (KOC) : Not available.  
Other adverse effects : No known significant effects or critical hazards.

### Section 13. Disposal considerations

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**United States - RCRA Acute hazardous waste "P" List:** Not listed

**United States - RCRA Toxic hazardous waste "U" List:** Not listed

### Section 14. Transport information

- U.S. DOT Classification : Not regulated for transportation.  
ICAO/IATA : Consult mode specific transport rules  
IMO/IMDG (maritime) : Consult mode specific transport rules

### Section 15. Regulatory information

- U.S. Federal regulations** : **United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.  
**United States - TSCA 4(a) - Final Test Rules:** Not listed  
**United States - TSCA 4(a) - ITC Priority list:** Not listed  
**United States - TSCA 4(a) - Proposed test rules:** Not listed

## SAFETY DATA SHEET

**RED 206C ACETAL**

Version Number 1.0  
Revision Date 07/30/2014

Page 13 of 15  
Print Date 07/31/2014

**United States - TSCA 4(f) - Priority risk review:** Not listed  
**United States - TSCA 5(a)2 - Final significant new use rules:** Not listed  
**United States - TSCA 5(a)2 - Proposed significant new use rules:** Not listed  
**United States - TSCA 5(e) - Substances consent order:** Not listed  
**United States - TSCA 6 - Final risk management:** Not listed  
**United States - TSCA 6 - Proposed risk management:** Not listed  
**United States - TSCA 8(a) - Chemical risk rules:** Not listed  
**United States - TSCA 8(a) - Dioxin/Furane precursor:** Not listed  
**United States - TSCA 8(a) - Chemical Data Reporting (CDR):** Not determined  
**United States - TSCA 8(a) - Preliminary assessment report (PAIR):** Listed Poly(dimethylsiloxane)

**United States - TSCA 8(c) - Significant adverse reaction (SAR):** Not listed  
**United States - TSCA 8(d) - Health and safety studies:** Not listed  
**United States - EPA Clean water act (CWA) section 307 - Priority pollutants:** Not listed  
**United States - EPA Clean water act (CWA) section 311 - Hazardous substances:** Not listed  
**United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances:** Not listed  
**United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances:** Not listed  
**United States - Department of commerce - Precursor chemical:** Not listed

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed  
**Clean Air Act Section 602 Class I Substances** : Not listed  
**Clean Air Act Section 602 Class II Substances** : Not listed  
**DEA List I Chemicals (Precursor Chemicals)** : Not listed  
**DEA List II Chemicals (Essential Chemicals)** : Not listed

**US. EPA CERCLA Hazardous Substances (40 CFR 302)**

not applicable

**SARA 311/312**

## SAFETY DATA SHEET

### RED 206C ACETAL

Version Number 1.0  
Revision Date 07/30/2014

Page 14 of 15  
Print Date 07/31/2014

**Classification** : Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Composition/information on ingredients

Name	%	Classification
Poly(dimethylsiloxane)	10 - 30	AH
Titanium dioxide	5 - 10	CH

#### SARA 313

Not applicable.

#### State regulations

**Massachusetts** : The following components are listed:  
Titanium dioxide

**New York** : None of the components are listed.

**New Jersey** : The following components are listed:  
Titanium dioxide

**Pennsylvania** : The following components are listed:  
Titanium dioxide

#### California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

**United States inventory (TSCA 8b)** : All components are listed or exempted.

**Canada inventory** : All components are listed or exempted.

#### International regulations

**International lists** :

- Australia inventory (AICS):** Not determined.
- Taiwan inventory (CSNN):** Not determined.
- Malaysia Inventory (EHS Register):** Not determined.
- EINECS:** Not determined.
- Japan inventory:** Not determined.
- China inventory (IECSC):** Not determined.
- Korea inventory:** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention** : Not listed

**SAFETY DATA SHEET****RED 206C ACETAL**

Version Number 1.0  
Revision Date 07/30/2014

Page 15 of 15  
Print Date 07/31/2014

List Schedule II Chemicals  
Chemical Weapons Convention : Not listed  
List Schedule III Chemicals

**Section 16. Other information****History**

Date of printing : 07/31/2014  
Date of issue/Date of revision : 07/30/2014  
Date of previous issue : 00/00/0000  
Version : 1.0

Key to abbreviations : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

References : Not available.

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.