

## **DB3810A SILVER**

Version Number 1.5 Revision Date 09/05/2018 Page 1 of 16 Print Date 11/28/2018

# SAFETY DATA SHEET

## **DB3810A SILVER**

## **Section 1. Identification**

**GHS product identifier** : DB3810A SILVER

Chemical name: MixtureCAS number: MixtureOther means of identification: FO20016526Product type: liquid

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).

## Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions. 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.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200).

Classification of the substance or

mixture

EYE IRRITATION - Category 2B

**GHS** label elements

Signal word : Warning

**Hazard statements** : Causes eye irritation.



## **DB3810A SILVER**

Version Number 1.5 Page 2 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

#### **Precautionary statements**

**General** : Not applicable.

**Prevention**: Wash hands thoroughly after handling.

**Response**: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. If

eye irritation persists: Get medical attention.

Storage:Not applicable.Disposal:Not applicable.Supplemental label elements:None known.Hazards not otherwise classified:None known.

## Section 3. Composition/information on ingredients

Substance/mixture: MixtureChemical name: MixtureOther means of identification: FO20016526

## **CAS** number/other identifiers

68515-48-0
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.



## DB3810A SILVER

Version Number 1.5 Page 3 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

Continue to rinse for at least 10 minutes. If irritation persists, 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 adverse health effects persist or are severe. 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.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. 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 if adverse health effects persist or are severe. 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 eye irritation.

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.



## DB3810A SILVER

Version Number 1.5 Page 4 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

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

Treat symptomatically. Contact poison treatment specialist Notes to physician

immediately if large quantities have been ingested or inhaled.

**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

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Firefighting measures

#### Extinguishing media

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

Specific hazards arising from the chemical

**Hazardous thermal** decomposition products In a fire or if heated, a pressure increase will occur and the container

may burst.

May emit Hydrogen Chloride (HCl).

Decomposition products may include the following materials:

carbon dioxide carbon monoxide halogenated compounds

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 selfcontained 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

No action shall be taken involving any personal risk or without For non-emergency personnel

> suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.



## DB3810A SILVER

Version Number 1.5 Revision Date 09/05/2018 Page 5 of 16 Print Date 11/28/2018

For emergency responders

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

## Methods and materials for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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,



## DB3810A SILVER

Version Number 1.5 Revision Date 09/05/2018

Page 6 of 16 Print Date 11/28/2018

away from incompatible materials (see Section 10) and food and drink. 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 environmental contamination.

## Section 8. Exposure controls/personal protection

#### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	None.
Titanium dioxide	OSHA PEL 1989 (1989-03-01) TWA 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) TWA 15 mg/m3 Form: Total dust ACGIH TLV (1996-05-18) TWA 10 mg/m3

**Appropriate engineering controls** 

Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

**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

6/16



## DB3810A SILVER

Version Number 1.5 Revision Date 09/05/2018 Page 7 of 16 Print Date 11/28/2018

higher degree of protection: chemical splash goggles.

#### **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.

Not available.

**Respiratory protection**: Based on the hazard and potential for exposure, select a respirator that

meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper

fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

#### **Appearance**

Odor

Physical state : liquid [liquid]

Color : GREY

**Odor threshold** Not available. Not available. Hq **Melting point** Not available. **Boiling point** Not available. Flash point Not available. **Burning time** Not available. **Burning rate** Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available.

Lower and upper explosive : Lower: Not available. (flammable) limits : Upper: Not available.

Vapor pressure : Not available. Vapor density : Not available.



## **DB3810A SILVER**

Version Number 1.5 Page 8 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

Relative density: Not available.Solubility: Not available.Solubility in water: Not available.Partition coefficient: n-: Not available.

octanol/water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.SADT: Not available.

Viscosity : Dynamic: Not available.

Kinematic: Not available.

## Section 10. Stability and reactivity

**Reactivity**: No specific test data related to reactivity available for this product or

its ingredients.

Chemical stability : Stable under recommended storage and handling conditions (see

Section 7).

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will

not occur.

**Conditions to avoid** : Keep away from extreme heat and oxidizing agents.

**Incompatible materials**: Avoid contact with acetal homopolymers and acetyl homopolymers

during processing.

**Hazardous decomposition** 

products

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**

Product/ingredient name	Result	Species	Dose	Exposure	
Titanium dioxide	Titanium dioxide				
Remarks - Oral:	No applicable toxicity data				
	LC50 Inhalation Rat - Male 6.82 Mg/l 4 h				
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-	
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich					
	LD50 Oral Rat 10,000 mg/kg -				
Remarks - Inhalation:	No applicable toxicity data				
Remarks - Dermal:	No applicable toxicity data				



## **DB3810A SILVER**

Version Number 1.5 Page 9 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

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

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild	Human		72 hrs	-
	irritant				
1,2-Benzenedicarboxylic	Eyes - Mild	Rabbit			-
acid, di-C8-10-branched	irritant				
alkyl esters, C9-rich					

Conclusion/Summary

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

**Sensitization** 

**Conclusion/Summary** 

SkinMixture.Not fully tested.RespiratoryMixture.Not fully tested.

**Mutagenicity** 

Conclusion/Summary : Mixture.Not fully tested.

**Carcinogenicity** 

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

Classification

CIMBBILIOWITCH				
Product/ingredient	OSHA	IARC	NTP	
name				
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)



## **DB3810A SILVER**

Version Number 1.5 Page 10 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

Not available.

#### **Aspiration hazard**

Not available.

Information on likely routes of

exposure

Not available.

## Potential acute health effects

**Eye contact** : Causes eye irritation.

Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

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

**Eye contact** : Adverse symptoms may include the following:

irritation watering redness

Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

## Delayed and immediate effects as well as 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: No known significant effects or critical hazards.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.



## **DB3810A SILVER**

Version Number 1.5 Revision Date 09/05/2018 Page 11 of 16 Print Date 11/28/2018

**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				
Titanium dioxide	nium dioxide						
	Acute LC50 > 1,000 Mg/l Marine	Fish - Fish	96 h				
	water	water					
Remarks - Acute - Fish:	Acute						
	Acute LC50 3 Mg/l Fresh water	Aquatic invertebrates.	48 h				
		Crustaceans					
Remarks - Acute - Aquatic	Acute						
invertebrates.:							
	Acute LC50 6.5 Mg/l Fresh water	Aquatic invertebrates.	48 h				
		Daphnia					
Remarks - Acute - Aquatic	Acute						
invertebrates.:							
Remarks - Acute - Aquatic	No applicable toxicity data						
plants:							
Remarks - Chronic - Fish:	No applicable toxicity data						
Remarks - Chronic -	No applicable toxicity data						
Aquatic invertebrates.:							
1,2-Benzenedicarboxylic acid,	Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich						
Remarks - Acute - Fish:	ks - Acute - Fish: No applicable toxicity data						
Remarks - Acute - Aquatic	No applicable toxicity data						
invertebrates.:							
Remarks - Acute - Aquatic	No applicable toxicity data						
plants:	,						
Remarks - Chronic - Fish:	No applicable toxicity data						
Remarks - Chronic -	No applicable toxicity data						
Aquatic invertebrates.:	,						
Conclusion/Summery	• Not available						

**Conclusion/Summary** : Not available.

## Persistence and degradability



## DB3810A SILVER

Version Number 1.5 Page 12 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

**Conclusion/Summary** : Not available.

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
1,2-Benzenedicarboxylic acid, di-C8-	8.8	3.00	low
10-branched alkyl esters, C9-rich			

#### **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 49CFR Ground/Air/Water : Not regulated for transportation.



## DB3810A SILVER

Version Number 1.5 Page 13 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

International Air ICAO/IATA

: Consult mode specific transport rules

International Water IMO/IMDG

: 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: Listed Diisononyl

phthalate

1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich

United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules:

Listed 4-Nonylphenol, branched

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 precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not

determined

United States - TSCA 8(a) - Preliminary assessment report

(PAIR): Listed 4-Nonylphenol, branched

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: Listed Vinyl chloride monomer

Phenol Zinc stearate

2-Ethylhexanoic acid zinc salt



**DB3810A SILVER** 

Version Number 1.5 Revision Date 09/05/2018

Page 14 of 16 Print Date 11/28/2018

United States - EPA Clean water act (CWA) section 311 -

Hazardous substances: 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)

Clean Air Act Section 602 Class I Not listed

**Substances** 

Clean Air Act Section 602 Class II

**Substances** 

**DEA List I Chemicals (Precursor** 

Chemicals)

**Chemicals**)

Listed

Not listed

Not listed

**DEA List II Chemicals (Essential** Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

**SARA 311/312** 

Classification Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Classification
Titanium dioxide	0.3 - 1	СН
1,2-Benzenedicarboxylic acid, di-	25 - 50	AH
C8-10-branched alkyl esters, C9-		
rich		

#### **SARA 313**

Not applicable.

**State regulations** 

Massachusetts None of the components are listed. None of the components are listed. New York The following components are listed: **New Jersey** 

Titanium dioxide

Ethene, chloro-, homopolymer



## DB3810A SILVER

Version Number 1.5 Revision Date 09/05/2018 Page 15 of 16 Print Date 11/28/2018

**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**

#### **Inventory list**

Australia : Not determined.

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

China : Not determined.

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

JapanNot determined.New ZealandNot determined.PhilippinesNot determined.Republic of KoreaNot determined.TaiwanNot determined.TurkeyNot determined.

**United States** : All components are listed or exempted.

## Section 16. Other information

#### Hazardous Material Information System (U.S.A.)

Health	/	1
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

#### **History**

**Date of printing** : 11/28/2018



## **DB3810A SILVER**

Version Number 1.5 Page 16 of 16 Revision Date 09/05/2018 Print Date 11/28/2018

**Date of issue/Date of revision** : 09/05/2018 **Date of previous issue** : 00/00/0000

Version : 1.5

**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 = 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.