

## 000000812452

Version Number 1.0 Page 1 of 16 Print Date 09/22/2023 Revision Date 09/20/2023

# SAFETY DATA SHEET

#### 000000812452

# **Section 1. Identification**

000000812452 **GHS** product identifier Chemical name Mixture CAS number Mixture Other means of identification FO20050289 **Product type** solid

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

Product use Industrial applications. Plastics.

Supplier's details AVIENT CORPORATION

33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (844) 4AVIENT

**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. Information provided on the health effects of this product is based on individual components. 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

**CARCINOGENICITY - Category 1A** 

**GHS** label elements

Hazard pictograms

Signal word Danger

1/16



## 000000812452

Version Number 1.0 Page 2 of 16 Revision Date 09/20/2023 Print Date 09/22/2023

**Hazard statements** : May cause cancer.

**Precautionary statements** 

: Not applicable.

**Prevention**: Obtain special instructions before use. Do not handle until all safety

precautions have been read and understood. Wear protective gloves,

protective clothing and eye or face protection.

**Response** : IF exposed or concerned: Get medical advice or attention.

**Storage** : Store locked up.

**Disposal** : Dispose of contents and container in accordance with all local,

regional, national and international regulations.

Supplemental label elements Hazards not otherwise classified

: None known. Not available.

None known.

# Section 3. Composition/information on ingredients

Substance/mixture: MixtureChemical name: MixtureOther means of identification: FO20050289

#### **CAS** number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	>= 50 - <= 75	13463-67-7
Carbon black	>= 10 - <= 25	1333-86-4
Quartz	> 0 - <= 0.3	14808-60-7

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



#### 000000812452

Version Number 1.0 Page 3 of 16 Revision Date 09/20/2023 Print Date 09/22/2023

**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.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated

clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. 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. 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: No known significant effects or critical hazards.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: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

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



### 000000812452

Version Number 1.0 Page 4 of 16 Revision Date 09/20/2023 Print Date 09/22/2023

Notes to physician : Treat symptomatically. Contact poison treatment specialist 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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>.

None known.

Specific hazards arising from the chemical

hemical Hazardous thermal

decomposition products

: No specific fire or explosion hazard.

Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides

Special protective actions for firefighters 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

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 specialized clothing is required to deal with the spillage, take note



### 000000812452

Version Number 1.0 Revision Date 09/20/2023 Page 5 of 16 Print Date 09/22/2023

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

: 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. 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



# 000000812452

Version Number 1.0 Revision Date 09/20/2023 Page 6 of 16 Print Date 09/22/2023

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
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 (2022-01-06) TWA 0.2 mg/m3 Form: respirable fraction, nanoscale particles TWA 2.5 mg/m3 Form: respirable fraction, finescale particles
Carbon black	OSHA PEL 1989 (1989-03-01) TWA 3.5 mg/m3 OSHA PEL (1993-06-30) TWA 3.5 mg/m3 NIOSH REL (1994-06-01) TWA 3.5 mg/m3 NIOSH REL (1994-06-01) TWA 0.1 mgPAH/m³ ACGIH TLV (2010-12-06) TWA 3 mg/m3 Form: Inhalable fraction
Quartz	OSHA PEL 1989 (1989-03-01) TWA 0.1 mg/m3 (Calculated as Quartz) Form: Respirable dust OSHA PEL Z3 (1997-09-03) TWA 250 MPPCF / (%SiO2+5) Form: Respirable TWA 10 MG /M3 / (%SiO2+2) Form: Respirable OSHA PEL Z3 (1997-09-03) TWA 30 MG /M3 / (%SiO2+2) Form: Total dust NIOSH REL (1994-06-01) TWA 0.05 mg/m3 Form: Respirable dust ACGIH TLV (2005-12-09) TWA 0.025 mg/m3 Form: Respirable fraction OSHA PEL (2016-06-23) TWA 0.05 mg/m3 Form: Respirable dust



# 000000812452

Version Number 1.0 Revision Date 09/20/2023 Page 7 of 16 Print Date 09/22/2023

Appropriate engineering controls  Environmental exposure 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.  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.
<u>Individual protection measures</u>		
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: safety glasses with side-shields.
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.
<b>Body protection</b>	:	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	:	Based on the hazard and potential for exposure, select a respirator that



## 000000812452

Version Number 1.0 Revision Date 09/20/2023 Page 8 of 16 Print Date 09/22/2023

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**

Physical state : solid Color : GREY

Odor : Not available.
Odor threshold : Not available.
pH : Not available.
Melting point : Not available.
Boiling point : Not available.
Flash point : Not applicable.

Burning time: Not available.Burning rate: Not available.Evaporation rate: Not available.Flammability (solid, gas): Not available.

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

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

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

octanol/water

**Auto-ignition temperature** : Not applicable.

**Decomposition temperature** : Not available. **SADT** : Not available.

Viscosity : Dynamic: Not available.

Kinematic: Not applicable.

# Section 10. Stability and reactivity

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



## 000000812452

Version Number 1.0 Page 9 of 16 Revision Date 09/20/2023 Print Date 09/22/2023

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** : Keep away from strong acids.

Oxidizer.

**Hazardous decomposition**: Under normal conditions of storage and use, hazardous decomposition

products should not be produced.

# Section 11. Toxicological information

# Information on toxicological effects

**Acute toxicity** 

products

Product/ingredient name	Result	Species	Dose	Exposure
Titanium oxide (TiO2)				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	Dusts and mists			
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-

Conclusion/Summary : Mixture. Not fully tested.

#### **Irritation/Corrosion**

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.

9/16



## 000000812452

Version Number 1.0 Page 10 of 16 Revision Date 09/20/2023 Print Date 09/22/2023

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium oxide (TiO2)	=	2B	-
Carbon black	-	2B	-
Quartz (SiO2)	-	1	Known to be a human carcinogen.

#### **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)

Name	Category	Route of exposure	Target organs
Quartz (SiO2)	Category 1	-	-

#### **Aspiration hazard**

Not available.

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

exposure

#### Potential acute health effects

Eye contact: No known significant effects or critical hazards.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: No specific data.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



# 000000812452

Version Number 1.0 Revision Date 09/20/2023 Page 11 of 16 Print Date 09/22/2023

#### **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**: May cause cancer. Risk of cancer depends on duration and level of

exposure.

**Mutagenicity**: No known significant effects or critical hazards.

**Teratogenicity** : Not available. **Developmental effects** : Not available.

**Fertility effects**: No known significant effects or critical hazards.

## Numerical measures of toxicity

## **Acute toxicity estimates**

N/A

Other 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.

# Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Titanium oxide (TiO2)			
	Acute LC50 > 1,000 Mg/l	Fish - Fundulus heteroclitus	96 h
	Marine water		
	Acute LC50 3 Mg/l Fresh water	Crustaceans - Ceriodaphnia	48 h
		dubia	
	Acute LC50 6.5 Mg/l Fresh	Daphnia - Daphnia pulex	48 h
	water		



# 000000812452

Version Number 1.0 Revision Date 09/20/2023 Page 12 of 16 Print Date 09/22/2023

Carbon black			
	Acute EC50 37.563 Mg/l Fresh	Daphnia - Daphnia magna	48 h
	water		

**Conclusion/Summary** : Not available.

Persistence and degradability

**Conclusion/Summary** : Not available.

### **Bioaccumulative potential**

Not available.

#### **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



# 000000812452

Version Number 1.0 Page 13 of 16 Revision Date 09/20/2023 Print Date 09/22/2023

U.S.DOT 49CFR Ground/Air/Water : Not regulated for transportation.

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: Not listed 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)? - Final significant new use rules:

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

determined

United States - TSCA 8(a) - Preliminary assessment report (PAIR): Listed Quinacridone (C.I. Pigment Violet 19)

**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:** 



# 000000812452

Version Number 1.0 Revision Date 09/20/2023

Page 14 of 16 Print Date 09/22/2023

Not listed

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

Not listed

**Substances** 

**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

Classification CARCINOGENICITY - Category 1A

## **Composition/information on ingredients**

Name	<b>%</b>	Classification
Titanium oxide (TiO2)	>= 50 - <= 75	CARCINOGENICITY - Category 2
Carbon black	>= 10 - <= 25	CARCINOGENICITY - Category 2
Quartz (SiO2)	> 0 - <= 0.3	CARCINOGENICITY - inhalation - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Not applicable.

**State regulations** 

Massachusetts The following components are listed:

> Titanium dioxide Carbon black Calcium carbonate

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

> Titanium dioxide Carbon black Calcium carbonate

> > 14/16



## 000000812452

Version Number 1.0 Page 15 of 16 Print Date 09/22/2023 Revision Date 09/20/2023

**Ouartz** 

The following components are listed: Pennsylvania

Titanium dioxide

Carbon black

Calcium carbonate

#### California Prop. 65

WARNING: This product can expose you to chemicals including Titanium dioxide, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Titanium dioxide	-	-
Carbon black	-	-
Quartz	-	-

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

Canada inventory At least one component is not listed in DSL but all such components

are listed in NDSL.

#### **International regulations**

#### **Inventory list**

**Taiwan** 

Australia Not determined.

Canada At least one component is not listed in DSL but all such components

are listed in NDSL.

All components are listed or exempted. China

Russian Federation inventory: Not determined. **Eurasian Economic Union** 

Japan Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.

All components are listed or exempted. **New Zealand** All components are listed or exempted. **Philippines** All components are listed or exempted. Republic of Korea All components are listed or exempted.

**Thailand** Not determined. **Turkey** Not determined.

**United States** All components are active or exempted.

Viet Nam Not determined.

# Section 16. Other information

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



#### 000000812452

Version Number 1.0 Revision Date 09/20/2023 Page 16 of 16 Print Date 09/22/2023

Health	*	0
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: 09/22/2023Date of issue/Date of revision: 09/20/2023Date 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 = 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.