

Version Number 1.2 Revision Date 03/31/2022 Page 1 of 17 Print Date 04/02/2022

SAFETY DATA SHEET

SILCOGUM TIOX1 RED VELVET

Section 1. Identification	n	
GHS product identifier Chemical name CAS number Other means of identification Product type	: : : : : : : : : : : : : : : : : : : :	SILCOGUM TIOX1 RED VELVET Mixture Mixture FO20043035 liquid
<u>Relevant identified uses of the subst</u> Product use	ance:	e or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	GSDI Specialty Dispersions, Inc. 1675 Navarre Road SW, Massillon, Ohio USA 44646
Emergency telephone number (with hours of operation)	:	1 (440) 930-1000 or 1 (844) 4AVIENT 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. 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	:	TOXIC TO REPRODUCTION - Category 2
GHS label elements		



Version Number 1.2 Revision Date 03/31/2022 Page 2 of 17 Print Date 04/02/2022

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	Suspected of damaging fertility or the unborn child.
Precautionary statements		
	:	Not applicable.
Prevention	:	Obtain special instructions before use. Wear protective gloves. Wear protective clothing. Wear eye or face protection.
Response	:	IF exposed or concerned: Get medical advice or attention.
Storage	:	Not applicable.
Disposal	:	Dispose of contents and container in accordance with all local,
		regional, national and international regulations.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.
		Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	FO20043035

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	>= 10 - <= 25	13463-67-7
Octamethylcyclotetrasiloxane	> 0 - <= 0.3	556-67-2

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.



Version Number 1.2 Revision Date 03/31/2022

Page 3 of 17 Print Date 04/02/2022

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 if irritation occurs.
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.
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

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

Over-exposure signs/symptoms



Version Number 1.2 Revision Date 03/31/2022 Page 4 of 17 Print Date 04/02/2022

Eye contact Inhalation	 No specific data. Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths 	
Skin contact	 skeletal malformations Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations 	
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations	
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.	

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.
		6

No specific treatment.

:

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Specific treatments

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or $\rm CO_2$. 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. 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



Version Number 1.2 Revision Date 03/31/2022 Page 5 of 17 Print Date 04/02/2022

		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
ine-ingitiers		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. Avoid breathing vapor or mist. 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 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 containn	nent a	nd 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.
		contact information and Section 13 for waste disposal.

Section 7. Handling and storage



Version Number 1.2 Revision Date 03/31/2022

Page 6 of 17 Print Date 04/02/2022

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. 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. Avoid breathing vapor or mist. 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 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 (1996-05-18) TWA 10 mg/m3	
Octamethylcyclotetrasiloxane	OARS WEEL (2018-05-07) TWA 10 ppm	



Version Number 1.2 Revision Date 03/31/2022

Page 7 of 17 Print Date 04/02/2022

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: 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.
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	:	Based on the hazard and potential for exposure, select a respirator that
		7/17



Version Number 1.2 Revision Date 03/31/2022 Page 8 of 17 Print Date 04/02/2022

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	:	liquid [Viscous liquid.]
Color	-	RED
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	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	:	Lower: Not available.
(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
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.
Aerosol product		
Heat of combustion	:	Not available.
Ignition distance	:	Not available.
Enclosed space ignition - Time	:	Not available.
equivalent		
Enclosed space ignition -	:	Not available.
Deflagration density		
Flame height	:	Not available.
-		



Version Number 1.2 Revision Date 03/31/2022

Page 9 of 17 Print Date 04/02/2022

Flame duration

: 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	:	Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity								
Product/ingredient name	Result	Species	Dose	Exposure				
Titanium oxide (TiO2)								
	LC50 Inhalation Dusts and mists	Rat - Male	6.82 Mg/l	4 h				
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-				
Cyclotetrasiloxane, 2,2,4,4,6,6	,8,8-octamethyl-							
	LD50 Oral	Rat	1,540 mg/kg	-				
	LC50 Inhalation Vapor	Rat	36 Mg/l	4 h				
	LD50 Dermal	Rat	1,770 mg/kg	-				

Conclusion/Summary

Mixture.Not fully tested.

:

:

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-octamethyl-	Eyes - Mild irritant	Rabbit	-	24 hrs	-
	Skin - Mild irritant	Rabbit	-	24 hrs	-

Conclusion/Summary Skin

Mixture.Not fully tested.



Version Number 1.2 Revision Date 03/31/2022 Page 10 of 17 Print Date 04/02/2022

Eyes Respiratory		Mixture.Not fully tested. Mixture.Not fully tested.
Sensitization		
Conclusion/Summary Skin Respiratory		Mixture.Not fully tested. Mixture.Not fully tested.
<u>Mutagenicity</u>		
Conclusion/Summary	: 1	Mixture.Not fully tested.
Carcinogenicity		
Conclusion/Summary	: 1	Mixture.Not fully tested.

Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium oxide (TiO2)	-	2B	-

<u>Reproductive toxicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.
Teratogenicity		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (single Not available.	exp	<u>osure)</u>
Specific target organ toxicity (repear Not available.	ted e	exposure)
Aspiration hazard Not available.		
Information on the likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact Inhalation	:	No known significant effects or critical hazards. No known significant effects or critical hazards.



Version Number 1.2 Revision Date 03/31/2022

Page 11 of 17 Print Date 04/02/2022

Skin contact Ingestion	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Symptoms related to the physical, cl	hemi	ical and toxicological characteristics
Eye contact	:	No specific data.
Inhalation	:	Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations
Skin contact	:	Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations
Ingestion		
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	:	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.
Fertility effects	:	Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral	Dermal	Inhalation (gases)	Inhalation (vapors)	Inhalation (dusts and mists)
SILCOGUM TIOX1 RED VELVET	438,481.1 mg/kg	N/A	N/A	N/A	N/A



Version Number 1.2 Revision Date 03/31/2022

Page 12 of 17 Print Date 04/02/2022

Titanium oxide (TiO2)	N/A	N/A	N/A	N/A	6.82 Mg/l
Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-octamethyl-	1,540 mg/kg	1,770 mg/kg	N/A	36 Mg/l	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		
Cyclotetrasiloxane, 2,2,4,4,6,6	5,8,8-octamethyl-		
	Acute LC50 0.204 - 3.483 Mg/l	Fish - Leuciscus idus ssp.	96 h
	Fresh water	melanotus	
	Chronic NOEC 0.0000044 Mg/l	Fish - Oncorhynchus mykiss	93 d
	Fresh water		
	Chronic NOEC 0.0079 Mg/l	Daphnia - Daphnia magna	21 d
	Fresh water		

Conclusion/Summary

: Not available.

Persistence and degradability

Conclusion/Summary :

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-	6.488	13,400.00	high



Version Number 1.2 Revision Date 03/31/2022

Page 13 of 17 Print Date 04/02/2022

octamethyl-				
<u>Mobility in soil</u>				
		Net envilable		
Soil/water partition coefficient (KOC)	:	Not available.		
Other adverse effects	:	No known significan	t effects or critical haza	rds.
Section 13. Disposal c	onsi	iderations		
^				
Disposal methods	:	possible. Disposal of should at all times co protection and waste authority requirement products via a licens disposed of untreated requirements of all a should be recycled. I when recycling is not disposed of in a safe emptied containers the containers or liners r	d to the sewer unless ful uthorities with jurisdict incineration or landfill s t feasible. This material way. Care should be tal hat have not been cleane nay retain some product	and any by-products nents of environmental d any regional local nd non-recyclable actor. Waste should not be ly compliant with the ion. Waste packaging hould only be considered and its container must be ken when handling

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.
International Air ICAO/IATA	:	Consult mode specific transport rules
International Water IMO/IMDG	:	Consult mode specific transport rules



Version Number 1.2 Revision Date 03/31/2022

Page 14 of 17 Print Date 04/02/2022

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 Octamethylcyclotetrasiloxane
		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: 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 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 Siloxanes and Silicones, di-Me, Me hydrogen Decamethylcyclopentasiloxane Dodecamethylcyclohexasiloxane
		Octamethylcyclotetrasiloxane 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) Clean Air Act Section 602 Class I Substances	:	Not listed



Version Number 1.2 Revision Date 03/31/2022

Page 15 of 17 Print Date 04/02/2022

Clean Air Act Section 602 Class II:Not listedSubstances:Not listedDEA List I Chemicals (Precursor:Not listedDEA List II Chemicals (Essential:Not listedChemicals):Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

: TOXIC TO REPRODUCTION - Category 2

Composition/information on ingredients

Name	%	Classification
Titanium oxide (TiO2)	>= 10 - <= 25	CARCINOGENICITY - Category 2
Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-octamethyl-	> 0 - <= 0.3	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY - oral - Category 4 ACUTE TOXICITY - dermal - Category 4 EYE IRRITATION - Category 2B TOXIC TO REPRODUCTION - Category 2

Not applicable.

State regulations		
Massachusetts	: None of the components are listed.	
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 can expose you to Titanium dioxide, which is 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
		8



Version Number 1.2 Revision Date 03/31/2022 Page 16 of 17 Print Date 04/02/2022

Titanium dioxide		-	-
United States incontours (TSCA 9b)		A 11	
United States inventory (TSCA 8b)	:	All components are active or exempted.	
Canada inventory	:	All components are listed or exempted.	
International regulations			
Inventory list			
Australia	:	All components are listed or exempted.	
Canada	:	All components are listed or exempted.	
China	:	All components are listed or exempted.	
Europe inventory	:	All components are listed or exempted.	
Japan	:	Not determined.	
New Zealand	:	All components are listed or exempted.	
Philippines	:	All components are listed or exempted.	
Republic of Korea	:	All components are listed or exempted.	
Taiwan	:	All components are listed or exempted.	
Turkey	:	Not determined.	
United States	:	All components are active or exempted.	

Section 16. Other information

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

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

History		
Date of printing	:	04/02/2022
Date of issue/Date of revision	:	03/31/2022
Date of previous issue	:	11/27/2019
Version	:	1.2



Version Number 1.2	
Revision Date 03/31/2022	

Page 17 of 17 Print Date 04/02/2022

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 = Internediate 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)
References	:	UN = United Nations Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.