SAFETY DATA SHEET



according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

WEICON SF Epoxy Resin

Section 1. Identification

GHS product identifier	: WEICON SF Epoxy Resin
Product code	: 102501

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

Epoxy resins

Supplier's details	: WEICON Canada Inc. 20 Steckle Place, Unit 20 Kitchener, Ontario N2E 2C3, CA www.weicon.ca E-mail: info@weicon.ca Telephone: +1-519-896-5252 Telefax: +1-519-896-5254
e-mail address of person responsible for this SDS	: msds@weicon.de
Emergency telephone number	: +1 202 464 2554 / TRANSPORT EMERGENCY CONTACT - USA (24h): Tel: +1 202 464 2554

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	 P280 - Wear protective gloves. Wear eye or face protection. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash thoroughly after handling.
Response	: P363 - Wash contaminated clothing before reuse.
Storage	: Not applicable.
Disposal	: P501 - Dispose of waste according to applicable legislation.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Ingredient name	%	CAS number
crystalline silica, respirable powder	≥25 - ≤50	14808-60-7
bis-[4-(2,3-epoxipropoxi)phenyl]propane	≥10 - ≤25	1675-54-3
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	≤10	9003-36-5
1,4-bis(2,3 epoxypropoxy)butane	≤3	2425-79-8

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

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 following exposure or if feeling unwell. 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	: Wash with plenty of soap and 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. In the event of any complaints or symptoms, avoid further exposure. 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 following exposure or if feeling unwell. 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 effect		
Eye contact	ises serious eye irritation.	
Inhalation	known significant effects or critical hazards.	
Skin contact	ises skin irritation. May cause an allergic skin reaction.	
Ingestion	known significant effects or critical hazards.	
Over-exposure signs/symptoms		
Eye contact	erse symptoms may include the following: n or irritation ering ness	
Inhalation	specific data.	
Skin contact	erse symptoms may include the following: ation ness	
Ingestion	specific data.	

Section 4. First aid measures

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

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Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide 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. 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).
<u>Methods and materials for</u> <u>containment and cleaning up</u>	:	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.
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.

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 : 11/21/2023
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 : No previous validation
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Section 7. Handling and storage

Precautions for safe handling	1	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
crystalline silica, respirable powder	OSHA PEL Z3 (United States, 6/2016).
	TWA: 250 mppcf / (%SiO2+5) 8 hours. Form:
	Respirable
	TWA: 10 mg/m ³ / (%SiO2+2) 8 hours. Form:
	Respirable
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 0.1 mg/m ³ , (as quartz) 8 hours. Form:
	Respirable dust
	OSHA PEL (United States, 5/2018). [Silica,
	crystalline]
	TWA: 50 µg/m ³ 8 hours. Form: Respirable
	dust
	ACGIH TLV (United States, 1/2021). [Silica,
	crystalline]
	TWA: 0.025 mg/m ³ 8 hours. Form:
	Respirable fraction
	NIOSH REL (United States, 10/2020).
	[SILICA, CRYSTALLINE]
	TWA: 0.05 mg/m³ 10 hours. Form: respirable
	dust
bis-[4-(2,3-epoxipropoxi)phenyl]propane	None.
Formaldehyde, oligomeric reaction products with 1-chloro-	None.
2,3-epoxypropane and phenol	
1,4-bis(2,3 epoxypropoxy)butane	None.

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.

Section 8. Exposure controls/personal protection

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 meas	sures
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. Contaminated work clothing should not be allowed out of the workplace. 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.
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. Recommended : 1 - 4 hours (breakthrough time): nitrile rubber ; 4 - 8 hours (breakthrough time): Viton®/butyl rubber
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 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. Recommended : organic vapor (Type AX) and particulate filter

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.	
Color	: Black.	
Odor	: Characteristic.	
Odor threshold	: Not available.	
рН	: Not applicable.	
Melting point/freezing point	: Not available.	
Boiling point, initial boiling point, and boiling range	: Not available.	
Flash point	: Closed cup: >100°C (>212	2°F)
Evaporation rate	: Not available.	
Flammability	: Not available.	
Lower and upper explosion limit/flammability limit	: Not available.	
Vapor pressure	:	

Section 9. Physical and chemical properties

	١	/apor Pres	sure at 20°C	\ \	/apor pres	sure at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
1,4-bis(2,3 epoxypropoxy)butane	<18.75	<2.5	EU A.4			
octamethylcyclotetrasiloxane	0.99	0.13				
Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol	0.62	0.083	EU A.4			
decamethylcyclopentasiloxane	0.25	0.033				
propylidynetrimethanol	0	0				
elative vapor density	Not availat	ole.	·····	·		·
elative density	Not availat	ole.				
ensity	: 2 g/cm ³ [20	D°C (68°F)]				
olubility(ies)	:					
Not available.						
olubility in water	Not availat	ole.				
artition coefficient: n- ctanol/water	Not applica	able.				

Auto-ignition temperature

	Ingredient name		°C	°F	Method
	iron		350	662	
	decamethylcyclopentasiloxane		372	701.6	ASTM E 659-78
	octamethylcyclotetrasiloxane		384 to 387	723.2 to 728.6	ASTM E 659
Deco	mposition temperature	: Not available.			
Visco	sity	: Not available.			
Flow	time (ISO 2431)	: Not available.			
Partic	cle characteristics				
Medi	an particle size	: Not applicable.			

Section 10. Stability and reactivity

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Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
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

Not available.

Acute toxicity estimates

Ī	Route	ATE value
	Dermal	30234.41 mg/kg
	Inhalation (vapors)	302.34 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Skin - Mild irritant	Rabbit	-	24 hours 500 uL	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
crystalline silica, respirable powder	-	1	Known to be a human carcinogen.
bis-[4-(2,3-epoxipropoxi) phenyl]propane	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
crystalline silica, respirable powder	Category 1	inhalation	-

Aspiration hazard

Not available.

Information on the likely : Not available. routes of exposure

Potential acute health effects

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Skin contact	: Causes skin irritation. May cause an allergic skin reaction.						
Inhalation	: No known	: No known significant effects or critical hazards.					
Eye contact	: Causes se	Causes serious eye irritation.					
r otential addie fieditif ene	010						

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Section 11. Toxicological information

Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phy	vsical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
Delayed and immediate effect	cts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
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 eff	<u>ects</u>
Not available.	
General	: Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
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	: No known significant effects or critical hazards.
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Section 12. Ecological information

<u>Toxicity</u>

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	2.7	-	Low
1,4-bis(2,3 epoxypropoxy) butane	-0.269	-	Low

Section 12. Ecological information

Mobility in soil

Soil/water partition	:	Not available.
coefficient (Koc)		

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.
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Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	ΙΑΤΑ
UN number	Not available.	UN3082	UN3082	UN3082	UN3082
UN proper shipping name	Not available.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi)) phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi) phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi) phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4- (2,3-epoxipropoxi) phenyl]propane, Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol)
Transport hazard class(es)	Not available.	9	9	9	9
Packing group	-	Ш	111	111	Ш
Environmental hazards	No.	Yes.	Yes.	Yes.	Yes.

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.

Mexico Classification : The environmentally hazardous substance mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$.

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Section 14. Transport information		
IMDG	This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	
ΙΑΤΑ	This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.	
Special precautions for user	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	
Transport in bulk according to IMO instruments	Not available.	

Section 15. Regulatory information

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U.S. Federal regulations	: TSCA 4(a) fina	al test rules: octamethylcyclotetrasiloxane		
	TSCA 8(a) PA	TSCA 8(a) PAIR: Siloxanes and Silicones, di-Me, reaction products with silica		
	TSCA 8(a) CD	R Exempt/Partial exemption: Not determined		
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			
<u>SARA 302/304</u>				
Composition/information	on ingredients			
No products were found.				
SARA 304 RQ	: Not applicable.			
SARA 311/312				
Classification	SKIN SENSITIZ	DN - Category 2 N - Category 2A ATION - Category 1 GET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1		
Composition/information	on ingredients			
Name	%	Classification		

Name	%	Classification	
crystalline silica, respirable powder	≥25 - ≤50	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	
bis-[4-(2,3-epoxipropoxi)phenyl] propane	≥10 - ≤25	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1	
Formaldehyde, oligomeric reaction products with 1-chloro- 2,3-epoxypropane and phenol	≤10	SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1	
1,4-bis(2,3 epoxypropoxy)butane	≤3	ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4	
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Section 15. Regulatory information

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1	
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State regulations Massachusetts

: The fo	ollowing components are	listed: SILICA,	CRYSTALLINE,	QUARTZ
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New York

: None of the components are listed.

New Jersey

The following components are listed: SILICA, QUARTZThe following components are listed: QUARTZ DUST

Pennsylvania California Prop. 65

WARNING: This product can expose you to Silica, crystalline, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	•	Maximum acceptable dosage level
Silica, crystalline	-	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

<u>intentery net</u>	
Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory: All components are listed or exempted.
Japan	: Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: Not determined.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: All components are listed or exempted.

Section 16. Other information

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



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.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

SKIN IRRITATION - Category 2 Calculation method EYE IRRITATION - Category 2A Calculation method SKIN SENSITIZATION - Category 1 Calculation method SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 Calculation method History Date of printing : 11/28/2023 Date of issue/Date of : 11/21/2023 revision : 1.01 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 = 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)		Classification	Justification		
Date of printing: 11/28/2023Date of issue/Date of revision: 11/21/2023Date of previous issue: No previous validationVersion: 1.01Key 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 = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973	EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1		Calculation method Calculation method		
Date of issue/Date of revision: 11/21/2023Date of previous issue Version: No previous validationVersion: 1.01Key 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 	History		•		
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N/A = Not available SGG = Segregation Group UN = United Nations	Key to abbreviations	BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classificati IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition of MARPOL = International Convention for the Preven as modified by the Protocol of 1978. ("Marpol" = m N/A = Not available SGG = Segregation Group	BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association 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) N/A = Not available SGG = Segregation Group		

References : Not available.

Indicates information that has changed from previously issued version.

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