SAFETY DATA SHEET

according to the Globally Harmonized System and US regulation

THIOPLAST EPS 25

Version 2 Revision Date 11/26/2017 Print Date 08/18/2022 US / Z8

1. IDENTIFICATION

Product name	:	THIOPLAST EPS 25	
Product Use Description	:	Specific use(s):	Basic polymer and reactive thinner for coatings, adhesives and sealants
Company	:	Nouryon Pulp and Performance Chemicals LLC 100 Matsonford Road, Building 1, Suite 500 Radnor PA 19087 US	
Telephone	:	+17705780858	
Fax	:	+17705781359	
E-mail address	:	psra.ppc@nouryon.com	
Emergency telephone	:	US CHEMTREC +1-800-424-9300 Internat'l +1-703-741-5971 (collect calls accepted) CANADA CANUTEC +1-613-996-6666	

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Color	yellow, brown
Odor	characteristic

GHS Classification

Skin irritation, Category 2
Eye irritation, Category 2A
Skin sensitization, Category 1
Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 2

GHS label elements

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

IARC : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA : No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Substance

Hazardous ingredients

Chemical name	CAS-No.	Classification	Concentration [% W/W]
Liquid polysulphide polymer with epoxy end groups	117527-71-6	Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Skin Sens. 1; H317 Aquatic Acute 2; H401 Aquatic Chronic 2; H411	>= 90 - <= 100

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.

Inhalation : If breathed in, move person into fresh air.
Consult a physician after significant exposure.

Skin contact : Take off contaminated clothing and shoes immediately.
Wash the skin immediately with soap and water.
Wash off with soap and plenty of water.
If skin irritation persists, call a physician.

Eye contact : Rinse with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
Obtain medical attention.

Ingestion : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

Notes to physician

Symptoms : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Risks : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	Water spray jet
Specific hazards during fire fighting / Specific hazards arising from the chemical	:	Do not allow run-off from fire fighting to enter drains or water courses.
Combustion products	:	Sulfur compounds
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

See also Section 9. Physical and chemical properties: Safety data

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment. Wear respiratory protection. Ensure adequate ventilation.
Emergency measures on accidental release	:	Evacuate personnel to safe areas. Only qualified personnel equipped with suitable protective equipment may intervene. Prevent unauthorized persons entering the zone.
Environmental precautions	:	Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up / Methods for containment	:	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Suitable material for picking up: Sand Kieselguhr
Reference to other sections	:	For disposal considerations see section 13. For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

Advice on safe handling	:	For personal protection see section 8. Avoid formation of aerosol. Do not breathe vapors or spray mist.

Avoid contact with skin, eyes and clothing.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.
Keep away from food and drink.

Other data : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

Occupational exposure limits of decomposition products

Decomposition products	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Sulphur dioxide	7446-09-5, 7446-09-5	STEL	0.25 ppm	2009-01-01	ACGIH	
	Further information	:	pulm func: Pulmonary function LRT irr: Lower Respiratory Tract irritation A4: Not classifiable as a human carcinogen			
		TWA	2 ppm 5 mg/m3	2013-10-08	NIOSH REL	
		ST	5 ppm 13 mg/m3	2013-10-08	NIOSH REL	
		TWA	5 ppm 13 mg/m3	1997-08-04	OSHA Z-1	
	Further information	:	(b): The value in mg/m3 is approximate.			
		TWA	2 ppm 5 mg/m3	1989-01-19	OSHA P0	
		STEL	5 ppm 13 mg/m3	1989-01-19	OSHA P0	
		PEL	2 ppm 5 mg/m3	2014-11-26	CAL PEL	
		STEL	5 ppm 10 mg/m3	2014-11-26	CAL PEL	
Hydrogen sulfide	7783-06-4, 7783-06-4	TWA	1 ppm	2013-03-01	ACGIH	
	Further information	:	CNS impair: Central Nervous System impairment URT irr: Upper Respiratory Tract irritation			
		STEL	5 ppm	2013-03-01	ACGIH	
	Further information	:	CNS impair: Central Nervous System impairment URT irr: Upper Respiratory Tract irritation			
		C	10 ppm 15 mg/m3	2013-10-08	NIOSH REL	
	Further	:	10 minute ceiling value			

	information					
		CEIL	20 ppm	2012-07-01	OSHA Z-2	
	Further information	:	Z37.2-1966			
		Peak	50 ppm	2012-07-01	OSHA Z-2	
	Further information	:	Z37.2-1966			
		TWA	10 ppm 14 mg/m3	1989-01-19	OSHA P0	
		STEL	15 ppm 21 mg/m3	1989-01-19	OSHA P0	
	Further information	:	(2): See Table Z-2			
		STEL	15 ppm 21 mg/m3	2014-11-26	CAL PEL	
		C	50 ppm	2014-11-26	CAL PEL	
		PEL	10 ppm 14 mg/m3	2014-11-26	CAL PEL	
Formaldehyde	50-00-0, 50-00-0	C	0.3 ppm	2016-03-01	ACGIH	
	Further information	:	DSEN: Dermal Sensitization RSEN: Respiratory sensitization URT irr: Upper Respiratory Tract irritation eye irr: Eye irritation (): Adopted values or notations enclosed are those for which changes are proposed in the NIC See Notice of Intended Changes (NIC) A2: Suspected human carcinogen			
		TWA	0.016 ppm	2013-10-08	NIOSH REL	
	Further information	:	Ca: Potential Occupational Carcinogen See Appendix A			
		C	0.1 ppm	2013-10-08	NIOSH REL	
	Further information	:	Ca: Potential Occupational Carcinogen See Appendix A 15 minute ceiling value			
	Further information	:	Substance listed; for more information see OSHA document 1910.1048			
	Further information	:	Substance listed; for more information see OSHA document 1910.1048			
	Further information	:	See 1910.1048			
		PEL	0.75 ppm	2012-04-03	OSHA CARC	
	Further information	:	1910.1048 This standard applies to all occupational exposures to formaldehyde, i.e. from formaldehyde gas, its solutions, and materials that release formaldehyde OSHA specifically regulated carcinogen			
		STEL	2 ppm	2012-04-03	OSHA CARC	
	Further information	:	1910.1048 This standard applies to all occupational exposures to formaldehyde, i.e. from formaldehyde gas, its solutions, and materials that release formaldehyde OSHA specifically regulated carcinogen			
		TWA	0.016 ppm	2013-10-08	NIOSH REL	
	Further information	:	Ca: Potential Occupational Carcinogen Formalin is an aqueous solution that is 37% formaldehyde by weight; inhibited solutions usually contain 6-12% methyl alcohol. Also see specific listings for Formaldehyde and Methyl alcohol. See Appendix A Formaldehyde			
		C	0.1 ppm	2013-10-08	NIOSH REL	

	Further information	:	Ca: Potential Occupational Carcinogen Formalin is an aqueous solution that is 37% formaldehyde by weight; inhibited solutions usually contain 6-12% methyl alcohol. Also see specific listings for Formaldehyde and Methyl alcohol. See Appendix A 15 minute ceiling value Formaldehyde			
		PEL	0.75 ppm	2014-11-26	CAL PEL	
	Further information	:	see Section 5217			
		STEL	2 ppm	2014-11-26	CAL PEL	
	Further information	:	see Section 5217			

Appropriate engineering controls
Effective exhaust ventilation system
Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection : Glove material: Neoprene

Skin and body protection : Protective suit

Respiratory protection : In the case of vapor or aerosol formation use a respirator with an approved filter.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.
Wash contaminated clothing before re-use.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : liquid

Color : yellow
brown

Odor : characteristic

Odor Threshold : No data available

Safety data

pH : 6.5 - 7.5

Melting point/range	:	-60 °C
Boiling point	:	Not applicable
Flash point	:	> 100 °C Method: DIN 51758
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Flammability (liquids)	:	Not classified as a flammability hazard
Lower explosion limit	:	No data available
Upper explosion limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Density	:	1,200 kg/m3 at 20 °C
Relative density	:	ca. 1.20 at 20 °C
Water solubility	:	insoluble
Solubility in other solvents	:	Soluble in:, Aromatic hydrocarbons
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, dynamic	:	2,000 - 3,000 mPa.s at 25 °C
Viscosity, kinematic	:	No data available
Flow time	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	Not classified as oxidizing.

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

Conditions to avoid	:	None known.
Materials to avoid	:	Strong bases Strong acids and oxidizing agents
Hazardous decomposition products	:	Sulphur dioxide Hydrogen sulfide Formaldehyde

Thermal decomposition	:	No data available
Reactivity	:	Stable under normal conditions.
Chemical stability	:	Stable under recommended storage conditions.
Hazardous reactions	:	No dangerous reaction known under conditions of normal use.

11. TOXICOLOGICAL INFORMATION

PRODUCT INFORMATION:

Hazard Summary

Acute toxicity	:	Not classified based on available information.
Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/eye irritation	:	Causes serious eye irritation.
Respiratory or skin sensitization	:	Respiratory sensitization: Not classified based on available information. Skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified based on available information.
Carcinogenicity	:	Not classified based on available information.
Reproductive toxicity	:	Not classified based on available information.
STOT-single exposure	:	Not classified based on available information.
STOT-repeated exposure	:	Not classified based on available information.
Aspiration hazard	:	Not classified based on available information.

Potential Health Effects

Inhalation	:	Inhalation of aerosols may cause irritation to mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
Skin	:	May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
Eyes	:	Causes serious eye irritation.
Ingestion	:	May cause irritation of the mucous membranes.
Aggravated Medical Condition	:	None known.
Symptoms of Overexposure	:	The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Toxicology Assessment

Further information : No further data available.

Carcinogenicity:

IARC : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA : No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

TOXICOLOGY DATA FOR THE INGREDIENTS:

Test result

Component: Liquid polysulphide polymer with epoxy end groups

Acute oral toxicity : LD50: > 5,000 mg/kg
Species: Rat

Acute dermal toxicity : LD50: > 2,000 mg/kg
Species: Rabbit

Skin irritation : Result: Irritating to skin.

Eye irritation : Result: Eye irritation

Sensitization : Result: May cause sensitization by skin contact.

12. ECOLOGICAL INFORMATION

PRODUCT INFORMATION:

Ecotoxicology Assessment

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

Test result

Elimination information (persistence and degradability)

Bioaccumulation : Bioaccumulation is unlikely.

Mobility : No data available

Biodegradability : Result: Not readily biodegradable.

Further information on ecology

Biochemical Oxygen Demand (BOD) : No data available

Hazardous to the ozone layer

Regulation	:	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	:	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

INGREDIENTS:

Ecotoxicology Assessment

Component: Liquid polysulphide polymer with epoxy end groups

Acute aquatic toxicity	:	Toxic to aquatic life.
Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

Test result

Component: Liquid polysulphide polymer with epoxy end groups

Ecotoxicity effects

Toxicity to fish	:	LC50: > 100 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow) Read-across (Analogy)
Toxicity to daphnia and other aquatic invertebrates	:	EC50: > 1 - 10 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Read-across (Analogy)

Elimination information (persistence and degradability)

Bioaccumulation	:	Bioaccumulation is unlikely.
Mobility	:	No data available
Biodegradability	:	Result: Not readily biodegradable.

Further information on ecology

Biochemical Oxygen Demand (BOD)	:	No data available

13. DISPOSAL CONSIDERATIONS

Product	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Hazardous waste Dispose of contents/container in accordance with local

regulation.

Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Offer rinsed packaging material to local recycling facilities.

14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (Liquid polysulphide polymer with epoxy end groups)
Class	:	9
Packing group	:	III
Labels	:	9
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Packing instruction (LQ)	:	Y964
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Liquid polysulphide polymer with epoxy end groups)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes (Liquid polysulphide polymer with epoxy end groups)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

UN/ID/NA number	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s.
	:	(Liquid polysulphide polymer with epoxy end groups)
Class	:	9
Packing group	:	III
Labels	:	9
ERG Code	:	171
Marine pollutant	:	yes (Liquid polysulphide polymer with epoxy end groups)
Reportable Quantity	:	This product does not contain an environmentally hazardous substance per 49 CFR 172.101, Appendix A.

15. REGULATORY INFORMATION

Notification status

DSL	:	NO. This product contains one or several components that are not on the Canadian DSL nor NDSL.
AICS	:	NO. Not in compliance with the inventory
NZIoC	:	NO. Not in compliance with the inventory
ENCS	:	NO. Not in compliance with the inventory
ISHL	:	NO. Not in compliance with the inventory
KECI	:	NO. Not in compliance with the inventory
PICCS	:	NO. Not in compliance with the inventory
IECSC	:	YES. On the inventory, or in compliance with the inventory
TCSI	:	YES. On the inventory, or in compliance with the inventory
TSCA	:	YES. All chemical substances in this product are either listed on the TSCA Inventory or in compliance with a TSCA Inventory exemption.

For explanation of abbreviations, see section 16.

TSCA list

TSCA 5(a)(2)	:	No substances are subject to a Significant New Use Rule.
TSCA 12(b)	:	No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	Skin corrosion or irritation Serious eye damage or eye irritation Respiratory or skin sensitization
SARA 302	:	This material does not contain any components with a section 302 EHS TPQ.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Liquid polysulphide polymer with epoxy end groups	117527-71-6

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California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Full text of H-Statements

H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H319	:	Causes serious eye irritation.
H401	:	Toxic to aquatic life.
H411	:	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CAL PEL	:	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits
OSHA CARC	:	OSHA Specifically Regulated Chemicals/Carcinogens
OSHA P0	:	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-2	:	USA. Occupational Exposure Limits (OSHA) - Table Z-2

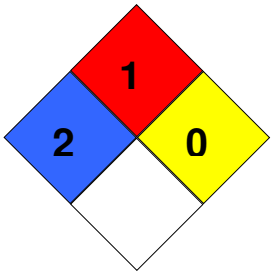
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
ACGIH / C	:	Ceiling limit
CAL PEL / STEL	:	Short term exposure limit
CAL PEL / PEL	:	Permissible exposure limit
CAL PEL / C	:	Ceiling
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST	:	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
NIOSH REL / C	:	Ceiling value not be exceeded at any time.
OSHA CARC / PEL	:	Permissible exposure limit (PEL)
OSHA CARC / STEL	:	Excursion limit
OSHA P0 / TWA	:	8-hour time weighted average
OSHA P0 / STEL	:	Short-term exposure limit
OSHA Z-1 / TWA	:	8-hour time weighted average
OSHA Z-2 / CEIL	:	Acceptable ceiling concentration
OSHA Z-2 / Peak	:	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Further information

HMIS Classification : Health Hazard: 2
Chronic Health Hazard: /
Flammability: 1
Physical hazards: 0

NFPA Classification : Health Hazard: 2
Fire Hazard: 1
Reactivity Hazard: 0



Notification status explanation

REACH	1907/2006 (EU)
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
NZIoC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances

	(PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)
TCSI	Taiwan Chemical Substance Inventory (TCSI)
TSCA	United States TSCA Inventory

Further information

Revision Date	11/26/2017

The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the c ontext of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old,call to make certain that this sheet is current. No warranty is made as to the product’s merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.