

JASA-Bond

Safety Data Sheet

According To Federal Register / Vol. 77 No. 58 / Monday, March 26, 2012 / Rules And Regulations
 Revision Date: 03/07/2023 Date of issue: 03/07/2023 Version: 2.0

SECTION 1: IDENTIFICATION

1.1. GHS product identifier

JASA-Bond

1.2. Other means of identification

Not available.

1.3. Material uses

Asphalt Additive

1.4. Supplier's details

Russell Standard 285 Kappa Drive
 Suite 300
 Pittsburgh, PA 15238

Directory: (800) 323-3053

Main: (412) 449-0700

Fax: (412) 449-0704

www.russellstandard.com

1.5. In case of emergency

Emergency Number: (800) 255-3924 (24 hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

2.2. Classification of the substance or mixture

SKIN CORROSION	Category 1B
SERIOUS EYE DAMAGE	Category 1
SKIN SENSITIZATION	Category 1
TOXIC TO REPRODUCTION	Category 1B
TOXIC TO REPRODUCTION	Effects on or via lactation
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation)	Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)	Category 2

2.3. GHS label elements

Hazard Pictograms:



Signal word:

Danger

Hazard statements: Causes severe skin burns and eye damage.
 May cause an allergic skin reaction. May cause respiratory irritation.
 May damage fertility or the unborn child. May cause harm to breast-fed children.
 May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys)

2.4 Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves: > 8 hours (breakthrough time): Buna-N or neoprene. Wear protective clothing: Recommended: lab coat , safety apron or chemical-resistant protective suit. Wear eye or face protection: Recommended: safety glasses with side-shields or splash goggles. Use only outdoors or in a well- ventilated area. Do not breathe vapor. Avoid contact during pregnancy or while nursing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Response: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified: None known.

Section 3. Composition/information on ingredients

3.1 Substance/mixture

Mixture

Ingredient name	%	CAS number
Aliphatic polyamides	≥10 - ≤30	Proprietary
Aliphatic polyol	≥5 - ≤10	Proprietary
Alkyl polyamines	≥5 - ≤10	Proprietary

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 and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

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. 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: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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.

4.2 Most important symptoms/effects, acute and delayed Potential acute health effects

Eye contact: Causes serious eye damage.

Inhalation: May cause respiratory irritation.

Skin contact: Causes severe burns. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

4.3 Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

- pain
- watering
- redness

Inhalation: Adverse symptoms may include the following:

- respiratory tract irritation
- coughing
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

Skin contact: Adverse symptoms may include the following:

- pain or irritation
- redness
- blistering may occur
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

Ingestion: Adverse symptoms may include the following:

- stomach pains
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

4.4 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.

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

5.1 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
nitrogen 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

6.1 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. Do not breathe 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).

6.2 Methods and materials for containment and cleaning up

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

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

7.1 Precautions for safe handling

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. Avoid exposure – obtain special instructions before use. Avoid contact during pregnancy or while nursing. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 locked up. 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

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Aliphatic polyol	OARS WEEL (United States, 1/2021). TWA: 10 mg/m ³ 8 hours.

Appropriate engineering controls: Use only with adequate ventilation. 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.

8.2 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. 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 and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: safety glasses with side-shields or splash goggles

8.3 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. > 8 hours (breakthrough time): Buna-N or neoprene

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. Recommended: lab coat, safety apron or chemical-resistant protective suit

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: In situations where misting or flying may occur, use appropriate certified respirators.

Section 9. Physical and chemical properties

9.1 Appearance

Physical state: Liquid. [Viscous liquid.]

Color: Amber.

Odor: Not available.

Odor threshold: Not available.

pH: 6 to 8 [Conc. (% w/w): 10%]

Melting point: Not available.

Boiling point: >200°C (>392°F)

Flash point: Closed cup: 143°C (289.4°F)

Burning time: Not applicable.

Burning rate: Not applicable.

Evaporation rate: <1 (ether (anhydrous) = 1)

Flammability (solid, gas): Not available.

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

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: 0.94

Solubility: Insoluble in the following materials: cold water and hot water.

Solubility in water: Not available.

Partition coefficient n- octanol/water: Not applicable.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Dynamic: 1000 mPa·s (1000 cP)

Section 10. Stability and reactivity

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: Reactive or incompatible with the following materials: oxidizing materials, reducing materials, combustible materials and acids.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Aliphatic polyamides	LD50 Oral	Rat - Male, Female	>2000 mg/kg	-
Aliphatic polyol	LD50 Dermal	Rabbit	11890 mg/kg	-
Alkyl polyamines	LC50 Inhalation Dusts and mists	Rat - Male, Female	2.48 to 4.56 mg/l	1 hours
	LC50 Inhalation Dusts and mists	Rat - Male, Female	0.62 to 1.14 mg/l	4 hours
	LD50 Dermal	Rat	16000 mg/kg	-
	LD50 Oral	Rat	2810 mg/kg	-

11.2 Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Aliphatic polyamides	Skin - Visible necrosis	Rabbit	-	3 minutes	24 hours
Aliphatic polyol	Skin - Mild irritant	Rabbit	-	500 mg	-
Alkyl polyamines	Eyes - Cornea opacity	Rabbit	2.55	72 hours	72 hours
				0.1ml / 100%	

11.3 Sensitization

Product/ingredient name	Route of exposure	Species	Result
Aliphatic polyamides	skin	Guinea pig	Sensitizing
Aliphatic polyol	skin	Guinea pig	Not sensitizing

11.4 Mutagenicity

Product/ingredient name	Test	Experiment	Result
Aliphatic polyamides	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476 <i>In vitro</i> Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	
	Alkyl polyamines	OECD 471 Bacterial Reverse Mutation Test	

11.5 Carcinogenicity

Not available.

11.6 Reproductive toxicity

Not available.

11.7 Teratogenicity

Not available.

11.8 Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Alkyl polyamines	Category 3	-	Respiratory tract irritation

11.9 Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Aliphatic polyol	Category 2	oral	kidneys
Alkyl polyamines	Category 2	oral	central nervous system (CNS)

11.10 Aspiration hazard:

Not available.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

11.11 Potential acute health effects

Eye contact: Causes serious eye damage.

Inhalation: May cause respiratory irritation.

Skin contact: Causes severe burns. May cause an allergic skin reaction.

Ingestion: No known significant effects or critical hazards.

11.12 Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

- pain
- watering
- redness

Inhalation: Adverse symptoms may include the following:

- respiratory tract irritation
- coughing
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

Skin contact: Adverse symptoms may include the following:

- pain or irritation
- redness
- blistering may occur
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

Ingestion: Adverse symptoms may include the following:

- stomach pains
- reduced fetal weight
- increase in fetal deaths
- skeletal malformations

11.13 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

Product/ingredient name	Result	Species	Dose	Exposure
Aliphatic polyamides	Sub-acute NOAEL Oral	Rat - Male, Female	50 mg/kg	-
	Sub-acute NOAEL Oral	Rat - Male, Female	75 mg/kg	-

General: May cause 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: May damage the unborn child.

Developmental effects: May cause harm to breast-fed children.

Fertility effects: May damage fertility.

11.14 Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	3774.19 mg/kg
Inhalation (dusts and mists)	6.2 mg/l

Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Aliphatic polyamides	Acute EC10 0.32 mg/l Fresh water	Algae	72 hours
	Acute EC50 1.17 mg/l Fresh water	Algae	72 hours
	Acute LC50 0.94 mg/l Fresh water	Fish	96 hours
	Chronic EC10 0.07 mg/l Fresh water	Daphnia	21 days
Aliphatic polyol	Acute LC50 75200000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Alkyl polyamines	Acute EC50 0.5 mg/l	Algae	72 hours
	Acute EC50 64 mg/l	Daphnia	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
	Chronic NOEC 2 mg/l	Fish	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Aliphatic polyamides	OECD 303A Simulation Test -Aerobic Sewage Treatment -Activated Sludge Units	>99.997 % - Readily - 48 days	DOC	Activated sludge
	OECD 301D Ready Biodegradability - Closed Bottle Test	75 % - Readily - 28 days	ThOD	Activated sludge
	OECD 301D Ready Biodegradability -Closed Bottle Test	60 % - Readily - 28 days	ThOD	Activated sludge
Aliphatic polyol	OECD 301 301A Ready Biodegradability - DOC Die- Away Test	28 % - 91.8 days	-	Activated sludge
Alkyl polyamines	-	50 to 70 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Aliphatic polyamides	-	-	Readily
Alkyl polyamines	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Aliphatic polyamides	5.6 to 7.3	-	high
Aliphatic polyol	-1.98	100	low
Alkyl polyamines	-3.16 to -1.46	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}): Not available.







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

Section 13. Disposal considerations

13.1 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.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN2735	UN2735	UN2735
UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Aliphatic polyamides, Alkyl polyamines). Marine pollutant (Aliphatic polyamides, Alkyl polyamines)	AMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic polyamides, Alkyl polyamines). Marine pollutant (Aliphatic polyamides, Alkyl polyamines)	Amines, liquid, corrosive, n.o.s. (Aliphatic polyamides, Alkyl polyamines)
Transport hazard class(es)	8  	8  	8  
Packing group	II	II	II
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	<p>This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packaging meet the general provisions of §§ 173.24 and 173.24a.</p> <p><u>Limited quantity</u> Yes.</p> <p><u>Packaging instruction</u> Exceptions: 154. Non-bulk: 202. Bulk: 242.</p> <p><u>Quantity limitation</u> Passenger aircraft/rail: 1 L. Cargo aircraft: 30 L.</p> <p><u>Special provisions</u> B2, IB2, T11, TPI, TP27</p>	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p><u>Emergency schedules</u> F-A, S-B</p> <p><u>Special provisions</u> 274</p> <p><u>IMDG Code Segregation group</u> SGG18 - Alkalis</p>	<p>The environmentally hazardous substance mark may appear if required by other transportation regulations.</p> <p><u>Quantity limitation</u> Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840.</p> <p><u>Special provisions</u> A3, A803</p>

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

15.1 U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

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

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

15.2 SARA 302/304 Composition/information on ingredients

No products were found.

SARA 304 RQ: Not applicable.

15.3 SARA 311/312

Classification: SKIN CORROSION - Category 1B

SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1

TOXIC TO REPRODUCTION - Category 1B

TOXIC TO REPRODUCTION - Effects on or via lactation

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

15.4 Composition/information on ingredients

Name	%	Classification
Aliphatic polyamides	Proprietary	SKIN CORROSION - Category 1B
		SERIOUS EYE DAMAGE - Category 1
		SKIN SENSITIZATION - Category 1B
Aliphatic polyol	Proprietary	ACUTE TOXICITY (oral) - Category 4
		SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Alkyl polyamines	Proprietary	ACUTE TOXICITY (inhalation) - Category 3
		SKIN CORROSION - Category 1B
		SERIOUS EYE DAMAGE - Category 1
		SKIN SENSITIZATION - Category 1
		TOXIC TO REPRODUCTION - Category 1B
		TOXIC TO REPRODUCTION - Effects on or via lactation
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	

15.5 State regulations

Massachusetts: None of the components are listed.

New York: None of the components are listed.

New Jersey: None of the components are listed.

Pennsylvania: The following components are listed: Aliphatic polyol

15.6 California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

15.7 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.

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals: Not listed.

15.8 International lists

National inventory

Australia: All components are listed or exempted.

Canada: All components are listed or exempted.

China: 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: Not determined.

Taiwan: All components are listed or exempted.

United States: All components are active or exempted.

Section 16. Other information

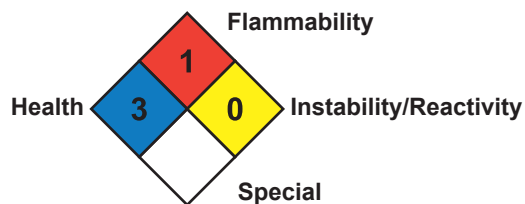
16.1 Hazardous Material Information System (U.S.A.)

Health	*	4
Flammability		1
Physical hazards		0

Caution: HMIS® ratings (4th Edition) 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.

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



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals

with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

16.3 History

Date of printing: 2023-03-07

Date of issue/Date of revision: 2024-07-25

Date of previous issue: 2022-07-11

Version: 2

16.4 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.

✔ Indicates information that has changed from previously issued version.

16.4 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.