### **AQUARIUS FOIL BINDER**

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## SAFETY DATA SHEET

### **AQUARIUS FOIL BINDER**

Section 1. Identification			
GHS product identifier	:	AQUARIUS FOIL BINDER	
Chemical name	:	Mixture	
CAS number	:	Mixture	
Other means of identification	:	FO20044476	
Product type	:	liquid	
Relevant identified uses of the subs	tance	or mixture and uses advised against	
Product use	:	Industrial applications. Plastics.	
Supplier's details	:	POLYONE CORPORATION	
		33587 Walker Road, Avon Lake, OH 44012	
		1 (440) 930-1000 or 1 (866) POLYONE	
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).	

### Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

#### **GHS label elements**

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<u>PolyOne</u>

Hazard pictograms		
Signal word Hazard statements	<ul> <li>Warning</li> <li>Causes serious eye irritation.</li> <li>Causes skin irritation.</li> </ul>	
Precautionary statements		
General Prevention Response	<ul> <li>Not applicable.</li> <li>Wear protective gloves. Wear eye or face protection. Wash hands thoroughly after handling.</li> <li>IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and eat to do. Continue rinsing. If eye irritation persists: Get medical attention.</li> </ul>	ısy
Storage Disposal Supplemental label elements Hazards not otherwise classified	<ul> <li>Not applicable.</li> <li>Not applicable.</li> <li>None known.</li> <li>None known.</li> </ul>	

### Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	FO20044476

CAS number/other identifiers

Ingredient name	%	CAS number
1,2-Propanediol	5 - 10	57-55-6
Urea	3 - 5	57-13-6
Paraffin waxes and Hydrocarbon waxes	3 - 5	8002-74-2



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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

### Section 4. First aid measures

#### Description of necessary first aid measures

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. 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 if adverse health effects persist or are severe. 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



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#### Potential acute health effects Eye contact Causes serious eye irritation. : No known significant effects or critical hazards. Inhalation : Skin contact Causes skin irritation. : Ingestion No known significant effects or critical hazards. • **Over-exposure signs/symptoms** 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 No specific data. Ingestion : Indication of immediate medical attention and special treatment needed, if necessary In case of inhalation of decomposition products in a fire, symptoms Notes to physician : may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. **Specific treatments** No specific treatment. : No action shall be taken involving any personal risk or without **Protection of first-aiders** : suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

### Section 5. Firefighting measures

#### Extinguishing media

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	:	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



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		nitrogen oxides sulfur oxides 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 For emergency responders	:	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. 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 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	
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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

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name	Exposure limits	
1,2-Propanediol	<b>AIHA WEEL (1999-01-01)</b> TWA 10 mg/m3	
Paraffin waxes and Hydrocarbon waxes	OSHA PEL 1989 (1989-03-01) TWA 2 mg/m3 NIOSH REL (1994-06-01) TWA 2 mg/m3 Form: Fume ACGIH TLV (1994-09-01)	
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ea	
	AIHA WEEL (1999-01-01) TWA 10 mg/m3
opropriate engineering controls : nvironmental exposure controls :	Good general ventilation should be sufficient to control worker exposure to airborne contaminants. 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.
lividual protection measures	
ygiene measures : ye/face protection :	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. 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.
<u>kin protection</u>	
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.
espiratory protection :	Based on the hazard and potential for exposure, select a respirator that 7/18

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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**

<b>Dhygiaal</b> state		liquid [liquid]
Physical state Color	:	NO PIGMENT
Odor	•	Not available.
0 401	•	1.00
Odor threshold	:	Not available.
pH	:	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: Not available.
Lower and upper explosive	•	Lower. Not available.
(flammable) limits	•	<b>Upper:</b> Not available.
	:	
(flammable) limits	:	Upper: Not available.
(flammable) limits Vapor pressure	:	<b>Upper:</b> Not available. Not available.
(flammable) limits Vapor pressure Vapor density	:	<b>Upper:</b> Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density	:	<b>Upper:</b> Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility		<b>Upper:</b> Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water	:	<b>Upper:</b> Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water	:	<b>Upper:</b> Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature	:	Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water	:	Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
(flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature Decomposition temperature		Upper: Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.

### Section 10. Stability and reactivity

Section 7).	
· · · · · · · · · · · · · · · · · · ·	storage and handling conditions (see
not occur.	storage and use, hazardous reactions will
Conditions to avoid : Keep away from extreme here	at and oxidizing agents.

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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

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.

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,2-Propanediol				
	LD50 Oral	Rat	20,000 mg/kg	-
<b>Remarks - Inhalation:</b>	No applicable tox	cicity data		
	LD50 Dermal	Rabbit	20,800 mg/kg	-
Urea				
	LD50 Oral	Rat	8,471 mg/kg	-
<b>Remarks - Inhalation:</b>	No applicable tox	cicity data		
Remarks - Dermal:	No applicable toxicity data			
Paraffin waxes and Hydrocarb	on waxes			
	LD50 Oral	Rat	2,000 mg/kg	-
<b>Remarks - Inhalation:</b>	No applicable tox	cicity data		
Remarks - Dermal:	No applicable tox	cicity data		
Conclusion/Summary	• Mixi	ture Not fully teste	h	

**Conclusion/Summary** : Mixture.Not fully tested.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2-Propanediol	Skin - Mild irritant	Woman		96 hrs	-
	Skin - Mild irritant	Human		168 hrs	-
	Skin - Moderate irritant	Human		72 hrs	-
	Eyes - Mild irritant	Rabbit			-
	Eyes - Mild irritant	Rabbit		24 hrs	-



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Skin - Moderate irritantChild96 hrs-UreaSkin - Moderate irritantHuman Moderate irritant24 hrs-Skin - MildHuman irritant72 hrs-Paraffin waxes and Hydrocarbon waxesSkin - Moderate irritantRabbit-Paraffin waxes and Hydrocarbon waxesSkin - Moderate irritantRabbit-Eyes - Mild irritantRabbit24 hrs-Eyes - Mild irritantRabbit24 hrs-Eyes - Mild irritantRabbit24 hrs-Skin - Mild irritantRabbit24 hrs-Eyes - Mild irritantRabbit24 hrs-Skin - Mild irritantRabbit24 hrs-Conclusion/Summary Skin: Mixture.Not fully testedSkin - Signatory: Mixture.Not fully testedSensitization: Mixture.Not fully testedConclusion/Summary Skin: Mixture.Not fully testedGonclusion/Summary Conclusion/Summary: Mixture.Not fully testedErenductive toxicity Conclusion/Summary: Mixture.Not fully tested.<							
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Urea       Skin - Moderate irritant       Human       24 hrs       -         Skin - Mild irritant       Skin - Moderate       Rabbit       -       -         Paraffin waxes and Hydrocarbon waxes       Skin - Moderate       Rabbit       -       -         Eyes - Mild irritant       Rabbit       24 hrs       -         Skin       :       Mixture.Not fully tested.       -         Respiratory       :       Mixture.Not fully tested.       -         Mutagenicity       :       Mixture.Not fully tested.       -         Conclusion/Summary       :       Mixture.Not fully tested.       -         Reproductive toxicity       :							
Moderate irritantModerateImage: Conclusion/SummaryModerateImage: Conclusion/SummaryRabbitImage: Conclusion/SummaryImage: Conclu							
irritantImage: state of the stat	Urea	Skin -	Human		24 hrs	-	
Skin - Mild irritant     Human     72 hrs     -       Paraffin waxes and Hydrocarbon waxes     Skin - Moderate irritant     Rabbit     -     -       Eyes - Mild irritant     Rabbit     24 hrs     -     -       Skin - Mild irritant     Rabbit     24 hrs     -       Skin - Mild irritant     Rabbit     24 hrs     -       Skin - Mild irritant     Rabbit     24 hrs     -       Conclusion/Summary     Eyes - Mild irritant     Rabbit     24 hrs     -       Skin     :     Mixture.Not fully tested.     -     -       Skin     :     Mixture.Not fully tested.     -     -       Skin     :     Mixture.Not fully tested.     -     -       Sensitization     :     Mixture.Not fully tested.     -     -       Skin     :     Mixture.Not fully tested.     -     -       Mutagenicity     :     Mixture.Not fully tested.     -     -       Conclusion/Summary     :     Mixture.Not fully tested.     -     -       Reproductive toxicity     :     -     -     -     -       Conclusion/Summary     :     Mixture.Not fully tested.     -     -       Conclusion/Summary     :     Mixture.Not fully tested.     - <td< td=""><th></th><td></td><td></td><td></td><td></td><td></td></td<>							
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Eyes - Mild irritant       Rabbit       -         Skin - Mild irritant       Rabbit       24 hrs       -         Eyes - Mild irritant       Rabbit       24 hrs       -         Conclusion/Summary Skin       :       Mixture.Not fully tested.       -         Eyes       :       Mixture.Not fully tested.       -         Respiratory       :       Mixture.Not fully tested.       -         Skin       :       Mixture.Not fully tested.       -         Sensitization       -       -       -         Conclusion/Summary Skin       :       Mixture.Not fully tested.       -         Sensitization       -       -       -       -         Conclusion/Summary       :       Mixture.Not fully tested.       -         Mutagenicity       -       -       -       -         Conclusion/Summary       :       Mixture.Not fully tested.       -       -         Reproductive toxicity       -       -       -       -       -         Conclusion/Summary       :       Mixture.Not fully tested.       -       -       -         Conclusion/Summary       :       Mixture.Not fully tested.       -       -         Conclusion/Summary	Hydrocarbon waxes						
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Conclusion/Summary       Skin       :       Mixture. Not fully tested.         Eyes       :       Mixture.Not fully tested.         Respiratory       :       Mixture.Not fully tested.         Sensitization       :       Mixture.Not fully tested.         Conclusion/Summary       :       Mixture.Not fully tested.         Skin       :       Mixture.Not fully tested.         Respiratory       :       Mixture.Not fully tested.         Mutagenicity       :       Mixture.Not fully tested.         Conclusion/Summary       :       Mixture.Not fully tested.         Conclusion/Summary       :       Mixture.Not fully tested.         Conclusion/Summary       :       Mixture.Not fully tested.         Reproductive toxicity       :       Mixture.Not fully tested.         Conclusion/Summary       :       Mixture.Not fully tested.         Teratogenicity       :       Mixture.Not fully tested.         Conclusion/Summary       :       Mixture.Not fully tested.         Conclusion/Summary       :       Mixture.Not fully tested.			Rabbit		24 hrs	-	
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Eyes Respiratory:Mixture.Not fully tested.Sensitization							
Respiratory:Mixture.Not fully tested.Sensitization:Mixture.Not fully tested.Conclusion/Summary Skin Respiratory:Mixture.Not fully tested.Mutagenicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Carcinogenicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Feratogenicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.							
SensitizationConclusion/Summary Skin Respiratory:Mixture.Not fully tested.Mutagenicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Carcinogenicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.							
Conclusion/Summary Skin Respiratory:Mixture.Not fully tested. Mixture.Not fully tested.Mutagenicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Carcinogenicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Reproductive toxicity:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.Conclusion/Summary:Mixture.Not fully tested.	Respiratory	: N	lixture.Not fully	y tested.			
Mutagenicity       ·         Conclusion/Summary       :         Mixture.Not fully tested.         Carcinogenicity         Conclusion/Summary       :         Mixture.Not fully tested.         Reproductive toxicity         Conclusion/Summary       :         Mixture.Not fully tested.         Conclusion/Summary       :         Mixture.Not fully tested.         Conclusion/Summary       :         Mixture.Not fully tested.	Conclusion/Summary Skin						
Carcinogenicity       ·         Conclusion/Summary       :         Mixture.Not fully tested.         Reproductive toxicity         Conclusion/Summary       :         Mixture.Not fully tested.         Teratogenicity         Conclusion/Summary       :         Mixture.Not fully tested.							
Conclusion/Summary: Mixture.Not fully tested.Reproductive toxicity	<b>Conclusion/Summary</b> : Mixture.Not fully tested.						
Reproductive toxicity       ·         Conclusion/Summary       :         Mixture.Not fully tested.         Teratogenicity         Conclusion/Summary       :         Mixture.Not fully tested.	<u>Carcinogenicity</u>						
Conclusion/Summary       : Mixture.Not fully tested.         Teratogenicity       : Mixture.Not fully tested.         Conclusion/Summary       : Mixture.Not fully tested.	Conclusion/Summary	: N	lixture.Not fully	y tested.			
Teratogenicity       · · · · · · · · · · · · · · · · · · ·	<b>Reproductive toxicity</b>						
Conclusion/Summary : Mixture.Not fully tested.	Conclusion/Summary	: N	lixture.Not fully	y tested.			
	<b>Teratogenicity</b>						
Specific target organ toxicity (single exposure)	Conclusion/Summary : Mixture.Not fully tested.						
	Specific target organ toxic	city (single exposu	<u>ire)</u>				

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Specific target organ toxicity (repeated exposure)

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Not available.

Not available.		exposure)
Aspiration hazard Not available.		
Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the physical, ch	nemi	cal 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
<b>-</b> /•		redness
Ingestion	:	No specific data.
Delayed and immediate effects as we	ell as	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.



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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.
<b>Developmental effects</b>	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.

Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	65,500.9 mg/kg

### Section 12. Ecological information

#### **Toxicity**

Result	Species	Exposure				
Acute LC50 710 Mg/l Fresh water	Fish - Fish	96 h				
Acute						
Acute EC50 > 110 Mg/l Fresh	Acute EC50 > 110 Mg/l Fresh Aquatic invertebrates. 48 h					
water	Daphnia					
Acute						
Acute LC50 1,020 Mg/l Fresh	Aquatic invertebrates.	48 h				
water	Crustaceans					
Acute						
No applicable toxicity data						
No applicable toxicity data						
No applicable toxicity data						
Acute LC50 0.000023 Mg/l Fresh	Fish - Fish	96 h				
water						
Acute						
Acute EC50 6,573.1 Mg/l Fresh	Aquatic invertebrates.	48 h				
water	Crustaceans					
Acute						
	Acute LC50 710 Mg/l Fresh water Acute Acute EC50 > 110 Mg/l Fresh water Acute Acute Acute Acute LC50 1,020 Mg/l Fresh water Acute No applicable toxicity data No applicable toxicity data No applicable toxicity data No applicable toxicity data Acute LC50 0.000023 Mg/l Fresh water Acute Acute EC50 6,573.1 Mg/l Fresh water	Acute LC50 710 Mg/l Fresh water       Fish - Fish         Acute       Aquatic invertebrates.         Acute EC50 > 110 Mg/l Fresh       Aquatic invertebrates.         Matter       Daphnia         Acute       Aquatic invertebrates.         Acute LC50 1,020 Mg/l Fresh       Aquatic invertebrates.         Acute LC50 1,020 Mg/l Fresh       Aquatic invertebrates.         Acute LC50 1,020 Mg/l Fresh       Aquatic invertebrates.         No applicable toxicity data       Crustaceans         No applicable toxicity data       No applicable toxicity data         No applicable toxicity data       Fish - Fish         Acute LC50 0.000023 Mg/l Fresh       Fish - Fish         Acute       Acute       Aquatic invertebrates.         Acute EC50 6,573.1 Mg/l Fresh       Aquatic invertebrates.         water       Crustaceans				



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invertebrates.:			
	Acute EC50 3,910 Mg/l Fresh	Aquatic invertebrates.	48 h
	water	Daphnia	
Remarks - Acute - Aquatic	Acute		
invertebrates.:			
Remarks - Acute - Aquatic	No applicable toxicity data		
plants:			_
	Chronic NOEC 2,000 Mg/l Fresh	Fish - Fish	30 d
	water		
Remarks - Chronic - Fish:	Chronic		
Remarks - Chronic -	No applicable toxicity data		
Aquatic invertebrates.:			
Paraffin waxes and Hydrocarb	on waxes		
Remarks - Acute - Fish:	No applicable toxicity data		
Remarks - Acute - Aquatic	No applicable toxicity data		
invertebrates.:			
Remarks - Acute - Aquatic	No applicable toxicity data		
plants:			
<b>Remarks - Chronic - Fish:</b>	No applicable toxicity data		
Remarks - Chronic -	No applicable toxicity data		
Aquatic invertebrates.:			
C	N. (		

**Conclusion/Summary** 

: Not available.

#### Persistence and degradability

**Conclusion/Summary** : Not available.

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
1,2-Propanediol	-1.070.085	-	low
Urea	-1.73	-	low

#### Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC)		
Other adverse effects	:	No known significant effects or critical hazards.

### Section 13. Disposal considerations

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**Disposal methods** 

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

:

United States - RCRA Toxic hazardous waste "U" List: Not listed

### Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water	: Not regulated for transportation.
International Air ICAO/IATA	: Consult mode specific transport rules
International Water IMO/IMDG	: Consult mode specific transport rules

### Section 15. Regulatory information

U.S. Federal regulations	<ul> <li>United States - TSCA 12(b) - Chemical export notification: None of the components are listed.</li> <li>United States - TSCA 4(a) - Final Test Rules: Not listed</li> <li>United States - TSCA 4(a) - ITC Priority list: Not listed</li> <li>United States - TSCA 4(a) - Proposed test rules: Not listed</li> <li>United States - TSCA 4(f) - Priority risk review: Not listed</li> <li>United States - TSCA 5(a)2 - Final significant new use rules:</li> </ul>
	United States - TSCA 5(a)2 - Proposed significant new use rules:

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		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): Not listed United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed United States - TSCA 8(c) - Significant adverse reaction (SAR): Listed Hexamethylene diisocyanate United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Hexamethylene diisocyanate United States - EPA Clean water act (CWA) section 311 - Hazardous substances: 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)	:	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

#### US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

#### SARA 311/312

Classification

SKIN IRRITATION - Category 2 : EYE IRRITATION - Category 2A



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#### **Composition/information on ingredients**

Name	%	Classification
1,2-Propanediol	>= 5 - <= 10	SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2B
Urea	>= 3 - <= 5	SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A
Paraffin waxes and	>= 3 - <= 5	ACUTE TOXICITY - oral - Category 4
Hydrocarbon waxes		SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2B

SARA 313 Not applicable.

<u>State regulations</u> Massachusetts New York New Jersey Pennsylvania	:	None of the components are listed. None of the components are listed. The following components are listed: 1,2-Propanediol Barium sulfate Paraffin waxes and Hydrocarbon waxes The following components are listed: 1,2-Propanediol
		Barium sulfate
		Paraffin waxes and Hydrocarbon waxes
<u>California Prop. 65</u> This product does not require a Safe Ha United States inventory (TSCA 8b)		
Canada inventory	:	Not determined.
<u>International regulations</u> Inventory list		
Australia		Not determined.
Canada	:	Not determined.
China	•	Not determined.
Europe inventory	-	Not determined.
Japan		Not determined.
•		40/40

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New Zealand Philippines Republic of Korea Taiwan	::	Not determined. Not determined. Not determined. Not determined.
Turkey United States	:	Not determined. All components are listed or exempted.

### **Section 16. Other information**

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

Health	/	2
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	:	03/02/2019
Date of issue/Date of revision	:	02/28/2019
Date of previous issue	:	00/00/0000
Version	:	1.0
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = 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		

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