BELZONA® 5813 - (SOLIDIFIER)

Date of compilation: 5/24/2024 Version: 1

SECTION 1: IDENTIFICATION

1.1 GHS Product identifier: BELZONA® 5813 - (SOLIDIFIER)

Other means of identification:

SN2959

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Protective coating. For industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Belzona, Inc.
14300 NW 60th Avenue
33014 Miami Lakes - Florida - United States
Phone: +1 305 594 4994
sds@belzona.com
www.belzona.com

1.4 Emergency phone number:

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture:

NFPA:

Health Hazards: 3
Flammability Hazards: 1
Instability Hazards: 0
Special Hazards: Not applicable (N/A)

29 CFR 1910.1200:

Classification of this product has been carried out in accordance with paragraph (d) of § 1910.1200.

Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302
Acute Tox. 4: Acute inhalation toxicity, Category 4, H332
Eye Dam. 1: Serious eye damage, Category 1, H318
Repr. 2: Reproductive toxicity, Category 2, H361
Skin Corr. 1B: Skin corrosion, Category 1B, H314
Skin Sens. 1B: Sensitisation, skin, Category 1B, H317
STOT RE 2: Specific target organ toxicity, repeated exposure, Category 2, H373

2.2 Label elements:

NFPA:

29 CFR 1910.1200:

Danger

Hazard statements:

Acute Tox. 4: H302 - Harmful if swallowed.
Acute Tox. 4: H332 - Harmful if inhaled.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Sens. 1B: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

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SECTION 2: HAZARD(S) IDENTIFICATION (continued)

P280: Wear protective gloves/protective clothing/eye protection.
P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

2.3 Hazards not otherwise classified (HNOC):

Not applicable (N/A)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable

3.2 Mixtures:

Chemical description: Formulated polyamines

Components:

Remaining components are non-hazardous and/or present at amounts below reportable limits. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

Identification	Chemical name	Concentration
CAS: 100-51-6	**benzyl alcohol**	**10 - <30 %**
CAS: 135108-88-2	**Formaldehyde, polymer with benzenamine, hydrogenated**	**10 - <30 %**
CAS: 111-40-0	**2,2´-iminodiethylamine**	**5 - <10 %**
CAS: 112-24-3	**3,6-diazaoctanethylenediamin**	**5 - <10 %**
CAS: 1761-71-3	**4,4´-methylenebis(cyclohexylamine)**	**1 - <5 %**
CAS: 69-72-7	**Salicylic acid**	**1 - <5 %**

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST-AID MEASURES

4.1 Description of necessary measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

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SECTION 4: FIRST-AID MEASURES (continued)

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and its inhalation, to the respiratory system. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administrate anything orally unless supervised by a doctor. Keep the person affected at rest.

4.2 Most important symptoms/effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

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

Not applicable (N/A)

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Specific hazards arising from the chemical:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and materials for containment and cleaning up:

For accidental releases in excess of reportables quantities (RQ) (Table 302.4), refer to 40 CFR 302 for detailed instructions concerning reporting requirements and notify the National Response Center (800) 424-8802.

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT. Transfer in fixed places that comply with the necessary security conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to containers of small amounts. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

Minimum Temp.: 41 ºF

Maximum Temp.: 86 ºF

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

US. ACGIH Threshold Limit Values (2022):

Identification	Occupational exposure limits		
2,2´-iminodiethylamine	TLV-TWA	1 ppm	
CAS: 111-40-0	TLV-STEL		

CALIFORNIA- TABLE AC-1 PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS:

Identification	Occupational exposure limits		
2,2´-iminodiethylamine	PEL	1 ppm	4 mg/m³
CAS: 111-40-0	STEL		

8.2 Appropriate engineering controls:

A.- Individual protection measures, such as personal protective equipment

Always provide effective general and, when necessary, local exhaust ventilation to maintain the ambient workplace atmosphere below the exposure limits.. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1. All information contained herein is a recommendation, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.

B.- Respiratory protection

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. Use respirator in accordance with manufacturer´s use limitations and OSHA standard 1910.134 (29CFR)

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.1 mm)	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. Use gloves in accordance with manufacturer´s use limitations and OSHA standard 1910.138 (29CFR)

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Face shield	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer´s use limitations and OSHA standard 1910.133 (29CFR)

E.- Bodily protection

Pictogram	PPE	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk	Replace boots at any sign of deterioration. Use foot protection in accordance with manufacturer´s use limitations and OSHA standard 1910.136 (29CFR)

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

40 CFR Part 59 (VOC):

V.O.C.(weight-percent): 51 % weight

V.O.C. at 68 ºF: 523.35 kg/m³ (523.35 g/L)

California Air Resources Board (CARB) - VOC Regulatory:

V.O.C.(weight-percent): 51 % weight

V.O.C. at 68 ºF: 523.35 kg/m³ (523.35 g/L)

South Coast Air Quality Management District (AQMD) - VOC Regulatory:

V.O.C.(weight-percent): 51 % weight

V.O.C. at 68 ºF: 523.35 kg/m³ (523.35 g/L)

Ozone Transport Commission (OTC) Rules - VOC Regulatory:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

V.O.C.(weight-percent):	51 % weight
V.O.C. at 68 ºF:	523.35 kg/m³ (523.35 g/L)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 68 ºF:	Liquid
Appearance:	Fluid
Color:	Brown
Odor:	Aminic
Odour threshold:	Not applicable (N/A) *

Volatility:

Boiling point at atmospheric pressure:	420 ºF
Vapour pressure at 68 ºF:	11 Pa
Vapour pressure at 122 ºF:	110.43 Pa (0.11 kPa)
Evaporation rate at 68 ºF:	Not applicable (N/A) *

Product description:

Density at 68 ºF:	1026.2 kg/m³
Relative density at 68 ºF:	1 - 1.04
Dynamic viscosity at 68 ºF:	Not applicable (N/A) *
Kinematic viscosity at 68 ºF:	Not applicable (N/A) *
Kinematic viscosity at 104 ºF:	Not applicable (N/A) *
Concentration:	Not applicable (N/A) *
pH:	>7 (ASTM D3838-05)
Vapour density at 68 ºF:	Not applicable (N/A) *
Partition coefficient n-octanol/water 68 ºF:	Not applicable (N/A) *
Solubility in water at 68 ºF:	Not applicable (N/A) *
Solubility properties:	Partially miscible
Decomposition temperature:	Not applicable (N/A) *
Melting point/freezing point:	Not applicable (N/A) *

Flammability:

Flash Point:	265 ºF
Flammability (solid, gas):	Not applicable (N/A) *
Autoignition temperature:	640 ºF
Lower flammability limit:	Not applicable (N/A) *
Upper flammability limit:	Not applicable (N/A) *

Particle characteristics:

Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not applicable (N/A) *
Oxidising properties:	Not applicable (N/A) *
Corrosive to metals:	Not applicable (N/A) *

*Not applicable (N/A) due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Heat of combustion:	Not applicable (N/A) *
Aerosols-total percentage (by mass) of flammable components:	Not applicable (N/A) *
Other safety characteristics:	
Surface tension at 68 ºF:	Not applicable (N/A) *
Refraction index:	Not applicable (N/A) *
Total lead:	0 ppm

*Not applicable (N/A) due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

Contains substances which require external energy for spontaneous decomposition. Form explosive peroxides when distilled, evaporated or otherwise concentrated.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Not applicable (N/A)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Suspected of damaging fertility or the unborn child

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not applicable (N/A)

Product-specific toxicological information:

Acute toxicity		Genus
LD50 oral	1500 mg/kg	
LC50 inhalation	20 mg/L	

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
2,2´-iminodiethylamine CAS: 111-40-0	LD50 oral	1620 mg/kg	Rat
	LD50 dermal	1045 mg/kg (ATEi)	Rabbit
	LC50 inhalation	>20 mg/L	
3,6-diazaoctanethylenediamin CAS: 112-24-3	LD50 oral	1716 mg/kg	Rat
	LD50 dermal	1465 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L	
benzyl alcohol CAS: 100-51-6	LD50 oral	500 mg/kg	Rat
	LD50 dermal	2500 mg/kg	
	LC50 inhalation	>20 mg/L	
Formaldehyde, polymer with benzenamine, hydrogenated CAS: 135108-88-2	LD50 oral	51 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
4,4´-methylenebis(cyclohexylamine) CAS: 1761-71-3	LD50 oral	480 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
Salicylic acid CAS: 69-72-7	LD50 oral	891 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>5 mg/L	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Acute toxicity:

Identification	Concentration		Species	Genus
benzyl alcohol	LC50	646 mg/L (48 h)	Leuciscus idus	Fish
CAS: 100-51-6	EC50	400 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	79 mg/L (3 h)	Scenedesmus subspicatus	Algae
2,2´-iminodiethylamine	LC50	430 mg/L (96 h)	Poecilia reticulata	Fish
CAS: 111-40-0	EC50	16 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	187 mg/L (72 h)	Selenastrum capricornutum	Algae
4,4´-methylenebis(cyclohexylamine)	LC50	67.8 mg/L (96 h)	Leuciscus idus	Fish
CAS: 1761-71-3	EC50	2.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Not applicable (N/A)		

Chronic toxicity:

Identification	Concentration		Species	Genus
benzyl alcohol	NOEC	48.897 mg/L	N/A	Fish
CAS: 100-51-6	NOEC	51 mg/L	Daphnia magna	Crustacean
2,2´-iminodiethylamine	NOEC	10 mg/L	Gasterosteus aculeatus	Fish
CAS: 111-40-0	NOEC	5.6 mg/L	Daphnia magna	Crustacean
4,4´-methylenebis(cyclohexylamine)	NOEC	1 mg/L	N/A	Fish
CAS: 1761-71-3	NOEC	4 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
benzyl alcohol	BOD5	Not applicable (N/A)	Concentration	100 mg/L
CAS: 100-51-6	COD	Not applicable (N/A)	Period	14 days
	BOD5/COD	Not applicable (N/A)	% Biodegradable	94 %
Formaldehyde, polymer with benzenamine, hydrogenated	BOD5	Not applicable (N/A)	Concentration	100 mg/L
CAS: 135108-88-2	COD	Not applicable (N/A)	Period	28 days
	BOD5/COD	Not applicable (N/A)	% Biodegradable	0 %
2,2´-iminodiethylamine	BOD5	Not applicable (N/A)	Concentration	10 mg/L
CAS: 111-40-0	COD	Not applicable (N/A)	Period	21 days
	BOD5/COD	Not applicable (N/A)	% Biodegradable	87 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
benzyl alcohol	BCF	0
CAS: 100-51-6	Pow Log	1.1
	Potential	Low
Formaldehyde, polymer with benzenamine, hydrogenated	BCF	20
CAS: 135108-88-2	Pow Log	4.02
	Potential	Low
2,2´-iminodiethylamine	BCF	2
CAS: 111-40-0	Pow Log	-1.3
	Potential	Low

12.4 Mobility in soil:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
benzyl alcohol CAS: 100-51-6	Koc	Not applicable (N/A)	Henry	Not applicable (N/A)
	Conclusion	Not applicable (N/A)	Dry soil	Not applicable (N/A)
	Surface tension	3.679E-2 N/m (77 ºF)	Moist soil	Not applicable (N/A)
Formaldehyde, polymer with benzenamine, hydrogenated CAS: 135108-88-2	Koc	9988	Henry	Not applicable (N/A)
	Conclusion	Immobile	Dry soil	Not applicable (N/A)
	Surface tension	Not applicable (N/A)	Moist soil	Not applicable (N/A)
2,2´-iminodiethylamine CAS: 111-40-0	Koc	Not applicable (N/A)	Henry	Not applicable (N/A)
	Conclusion	Not applicable (N/A)	Dry soil	Not applicable (N/A)
	Surface tension	4.164E-2 N/m (77 ºF)	Moist soil	Not applicable (N/A)
3,6-diazaoctanethylenediamin CAS: 112-24-3	Koc	Not applicable (N/A)	Henry	Not applicable (N/A)
	Conclusion	Not applicable (N/A)	Dry soil	Not applicable (N/A)
	Surface tension	4.307E-2 N/m (77 ºF)	Moist soil	Not applicable (N/A)
Salicylic acid CAS: 69-72-7	Koc	Not applicable (N/A)	Henry	Not applicable (N/A)
	Conclusion	Not applicable (N/A)	Dry soil	Not applicable (N/A)
	Surface tension	2.444E-2 N/m (405.05 ºF)	Moist soil	Not applicable (N/A)

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

The next characteristic per RCRA could apply to the unused product if it becomes a waste material: Corrosivity. The next EPA hazardous waste number could apply: D002.
IT IS THE RESPONSIBILITY OF THE WASTE GENERATOR TO EVALUATE WHETHER HIS WASTES ARE HAZARDOUS BY CHARACTERISTICS OR LISTING.

Waste management (disposal and evaluation):

Follow RCRA framework and EPA regulation for to ensure that hazardous waste is managed safely and properly.Waste should not be disposed of to drains. Remind, It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristics or listing.See section 6 for further information about Accidental release measures.

Regulations related to waste management:

Legislation related to waste management:

40 CFR Solid Wastes - Part 239 through 282.
State regulatory requirements for generators may be more stringent than those in the federal program. Be sure to check the state´s policies.

SECTION 14: TRANSPORT INFORMATION

Other information:

Labeling and packaging requirements may vary with pack and load size. Please refer to the current transport regulations.

Transport of dangerous goods by land:

With regard to 49 CFR on the Transport of Dangerous Goods:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1 UN number: UN2735

14.2 UN proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Formaldehyde, polymer with benzenamine, hydrogenated)

14.3 Transport hazard class(es): 8

Labels: 8

14.4 Packing group, if applicable: II

14.5 Marine pollutant: No

14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises

Physico-Chemical properties: see section 9

Limited quantities: 1 L

14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable (N/A)

Transport of dangerous goods by sea:

With regard to IMDG 41-22:

14.1 UN number: UN2735

14.2 UN proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Formaldehyde, polymer with benzenamine, hydrogenated)

14.3 Transport hazard class(es): 8

Labels: 8

14.4 Packing group, if applicable: II

14.5 Marine pollutant: No

14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises

Special regulations: 274

EmS Codes: F-A, S-B

Physico-Chemical properties: see section 9

Limited quantities: 1 L

Segregation group: SGG18

14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable (N/A)

Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

14.1 UN number: UN2735

14.2 UN proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Formaldehyde, polymer with benzenamine, hydrogenated)

14.3 Transport hazard class(es): 8

Labels: 8

14.4 Packing group, if applicable: II

14.5 Marine pollutant: No

14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises

Physico-Chemical properties: see section 9

14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable (N/A)

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

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SECTION 15: REGULATORY INFORMATION (continued)

- CALIFORNIA LABOR CODE - The Hazardous Substances List: *2,2´-iminodiethylamine (111-40-0)*
- California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Birth defects or other reproductive harm: Not applicable (N/A)
- California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Cancer: Not applicable (N/A)
- CANADA-Domestic Substances List (DSL): *benzyl alcohol (100-51-6)* ; *Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)* ; *2,2´-iminodiethylamine (111-40-0)* ; *3,6-diazaoctanethylenediamin (112-24-3)* ; *4,4´-methylenebis(cyclohexylamine) (1761-71-3)* ; *Salicylic acid (69-72-7)*
- CANADA-Non-Domestic Substances List (NDSL): Not applicable (N/A)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantities: Not applicable (N/A)
- Hazardous Air Pollutants (Clean Air Act): Not applicable (N/A)
- Massachusetts RTK - Substance List: *benzyl alcohol (100-51-6)* ; *2,2´-iminodiethylamine (111-40-0)* ; *3,6-diazaoctanethylenediamin (112-24-3)*
- Minnesota - Hazardous substances ERTK: *2,2´-iminodiethylamine (111-40-0)*
- New Jersey Worker and Community Right-to-Know Act: *2,2´-iminodiethylamine (111-40-0)* ; *3,6-diazaoctanethylenediamin (112-24-3)*
- New York RTK - Substance list: *2,2´-iminodiethylamine (111-40-0)* ; *3,6-diazaoctanethylenediamin (112-24-3)*
- NTP (National Toxicology Program): Not applicable (N/A)
- OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Not applicable (N/A)
- Pennsylvania Worker and Community Right-to-Know Law: *benzyl alcohol (100-51-6)* ; *2,2´-iminodiethylamine (111-40-0)* ; *3,6-diazaoctanethylenediamin (112-24-3)*
- Rhode Island - Hazardous substances RTK: Not applicable (N/A)
- The Toxic Substances Control Act (TSCA) : *benzyl alcohol (100-51-6)* ; *Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)* ; *2,2´-iminodiethylamine (111-40-0)* ; *3,6-diazaoctanethylenediamin (112-24-3)* ; *4,4´-methylenebis(cyclohexylamine) (1761-71-3)* ; *Salicylic acid (69-72-7)*
- Toxic chemical release reporting under EPCRA section 313 (40 CFR Part 372): Not applicable (N/A)

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information provided in this safety data sheet as a foundation for conducting workplace-specific risk assessments. These assessments will help establish the appropriate risk prevention measures for handling, using, storing, and disposing of this product.

Other legislation:

Take into consideration other applicable federal, state, and local laws and local regulations.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H373: May cause damage to organs through prolonged or repeated exposure.
H361: Suspected of damaging fertility or the unborn child.
H302: Harmful if swallowed.
H332: Harmful if inhaled.

Advice related to training:

According to 29 CFR 1910. 1200, training on chemical hazards is necessary for employees using this product. This training will facilitate their understanding and interpretation of the safety data sheet, as well as the product label.

Principal bibliographical sources:

Occupational Safety & Health Administration (OSHA).

Abbreviations and acronyms:

IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
IARC: International Agency for Research on Cancer

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SECTION 16: OTHER INFORMATION (continued)

Date of compilation: 5/24/2024

END OF SAFETY DATA SHEET