SECTION 1: IDENTIFICATION

1.1 GHS Product identifier: DH56

Other means of identification:

Not applicable (N/A)

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Adhesive. For professional users/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:

The Ruscoe Company
485 Kenmore Blvd
44301 Akron - United States
Phone: 330-253-8148
Sales@Ruscoe.com; SDS@Ruscoe.com
www.ruscoe.com

1.4 Emergency phone number: Chemtrec 1-800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture:

29 CFR 1910.1200:

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

Asp. Tox. 1: Aspiration hazard, Category 1, H304
Flam. Liq. 2: Flammable liquids, Category 2, H225
Repr. 2: Reproductive toxicity, Category 2, H361
Skin Irrit. 2: Skin irritation, Category 2, H315
STOT RE 2: Specific target organ toxicity, repeated exposure, Category 2, H373
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

2.2 Label elements:

29 CFR 1910.1200:

Danger

Hazard statements:

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
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.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P370+P378: In case of fire: Use Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC) to extinguish.
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Substances that contribute to the classification

TOLUENE (CAS: 108-88-3); HEXANE (CAS: 110-54-3); 4-tert-butylphenol (CAS: 98-54-4)

Additional labeling:

- CONTINUED ON NEXT PAGE -

SECTION 2: HAZARD(S) IDENTIFICATION (continued)

WARNING

This product can expose you to chemicals including Toluene, n-hexane, Benzene, which is [are] known to the State of California to cause cancer, and Benzene, Ethylbenzene, Naphthalene, cadmium oxide (non-pyrophoric), Lead monoxide, Formaldehyde, which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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: Mixture composed of additives and resins in solvents

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/Classification	Concentration
CAS: 108-88-3	**Toluene** Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger	**25 - <50 %**
CAS: 110-54-3	**n-hexane** Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger	**25 - <50 %**
CAS: 98-54-4	**4-tert-butylphenol** Eye Dam. 1: H318; Repr. 2: H361; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger	**<1 %**

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:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, 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:

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 medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administrate anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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SECTION 4: FIRST-AID MEASURES (continued)

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 available

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

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. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

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.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

- CONTINUED ON NEXT PAGE -

SECTION 7: HANDLING AND STORAGE (continued)

Comply with the current standards 29 CFR 1910 Occupational Safety and Health Standards. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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

Because the product is a flammable liquid, storage should meet the requirement of 29 CFR 1910.106, Flammable and Combustible Liquids Code. Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,…) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems and with the minimum requirements for protecting the security and health of workers. Consult section 10 for 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.: 90 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. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

Identification	Occupational exposure limits		
Toluene (1) CAS: 108-88-3	8-hour TWA PEL	200 ppm	300 mg/m³
	Ceiling Values - TWA PEL		
n-hexane CAS: 110-54-3	8-hour TWA PEL	500 ppm	1800 mg/m³
	Ceiling Values - TWA PEL		
cyclohexane CAS: 110-82-7	8-hour TWA PEL	300 ppm	1050 mg/m³
	Ceiling Values - TWA PEL		
Benzene (1) CAS: 71-43-2	8-hour TWA PEL	10 ppm	
	Ceiling Values - TWA PEL	25 ppm	
Ethylbenzene (1) CAS: 100-41-4	8-hour TWA PEL	100 ppm	435 mg/m³
	Ceiling Values - TWA PEL		
Naphthalene CAS: 91-20-3	8-hour TWA PEL	10 ppm	50 mg/m³
	Ceiling Values - TWA PEL		
Magnesium oxide CAS: 1309-48-4	8-hour TWA PEL		15 mg/m³
	Ceiling Values - TWA PEL		
zinc oxide	8-hour TWA PEL		5 mg/m³

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

Identification	Occupational exposure limits		
CAS: 1314-13-2	Ceiling Values - TWA PEL		
Xylene (1)	8-hour TWA PEL	100 ppm	435 mg/m³
CAS: 1330-20-7	Ceiling Values - TWA PEL		
Formaldehyde (2)	8-hour TWA PEL	0.75 ppm	
CAS: 50-00-0	Ceiling Values - TWA PEL	2 ppm	
Carbon black	8-hour TWA PEL		3.5 mg/m³
CAS: 1333-86-4	Ceiling Values - TWA PEL		

US. ACGIH Threshold Limit Values (2022):

Identification	Occupational exposure limits		
Toluene (1)	TLV-TWA	20 ppm	
CAS: 108-88-3	TLV-STEL		
n-hexane	TLV-TWA	20 ppm	
CAS: 110-54-3	TLV-STEL		
cyclohexane	TLV-TWA	100 ppm	
CAS: 110-82-7	TLV-STEL		
Benzene (1)	TLV-TWA	0.5 ppm	
CAS: 71-43-2	TLV-STEL	2.5 ppm	
Ethylbenzene (1)	TLV-TWA	20 ppm	
CAS: 100-41-4	TLV-STEL		
Naphthalene	TLV-TWA	10 ppm	
CAS: 91-20-3	TLV-STEL		
Magnesium oxide	TLV-TWA		10 mg/m³
CAS: 1309-48-4	TLV-STEL		
zinc oxide	TLV-TWA		2 mg/m³
CAS: 1314-13-2	TLV-STEL		10 mg/m³
cadmium oxide (non-pyrophoric)	TLV-TWA		0.002 mg/m³
CAS: 1306-19-0	TLV-STEL		
Lead monoxide	TLV-TWA		0.05 mg/m³
CAS: 1317-36-8	TLV-STEL		
Xylene (1)	TLV-TWA	100 ppm	
CAS: 1330-20-7	TLV-STEL	150 ppm	
Formaldehyde (2)	TLV-TWA	0.1 ppm	
CAS: 50-00-0	TLV-STEL	0.3 ppm	
disulfiram	TLV-TWA		2 mg/m³
CAS: 97-77-8	TLV-STEL		
Talc	TLV-TWA		2 mg/m³
CAS: 14807-96-6	TLV-STEL		
Carbon black	TLV-TWA		3 mg/m³
CAS: 1333-86-4	TLV-STEL		

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

Identification	Occupational exposure limits		
Toluene (1)	PEL	10 ppm	37 mg/m³
CAS: 108-88-3	STEL	150 ppm	560 mg/m³
n-hexane	PEL	50 ppm	180 mg/m³
CAS: 110-54-3	STEL		
cyclohexane	PEL	300 ppm	1050 mg/m³
CAS: 110-82-7	STEL		
Benzene (1)	PEL	1 ppm	
CAS: 71-43-2	STEL		
Ethylbenzene (1)	PEL	5 ppm	22 mg/m³
CAS: 100-41-4	STEL	30 ppm	130 mg/m³
Naphthalene	PEL	0.1 ppm	0.5 mg/m³
CAS: 91-20-3	STEL		
Magnesium oxide	PEL		10 mg/m³

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

Identification	Occupational exposure limits		
CAS: 1309-48-4	STEL		
zinc oxide CAS: 1314-13-2	PEL		5 mg/m³
	STEL		10 mg/m³
cadmium oxide (non-pyrophoric) CAS: 1306-19-0	PEL		0.005 mg/m³
	STEL		
Lead monoxide CAS: 1317-36-8	PEL		0.05 mg/m³
	STEL		
Xylene (1) CAS: 1330-20-7	PEL	100 ppm	435 mg/m³
	STEL	150 ppm	655 mg/m³
Formaldehyde (2) CAS: 50-00-0	PEL	0.75 ppm	
	STEL	2 ppm	
disulfiram CAS: 97-77-8	PEL		2 mg/m³
	STEL		
Talc CAS: 14807-96-6	PEL		2 mg/m³
	STEL		
Carbon black CAS: 1333-86-4	PEL		3.5 mg/m³
	STEL		

(1) Skin
(2) Dermal sensitisation

Biological limit values:

Biological Exposure Indices (BEIs®) - ACGIH

Identification	BEIs®	Determinant	Sampling Time
Toluene CAS: 108-88-3	0.02 mg/L	Toluene in blood	Prior to last shift of workweek
n-hexane CAS: 110-54-3	0.5 mg/L	2,5-Hexanedione in urine	End of shift
cyclohexane CAS: 110-82-7	50 mg/g (NULL)	Cyclohexanol in urine	End of shift at end of workweek
Benzene CAS: 71-43-2	0.025 mg/g (NULL)	S-Phenylmercapturic acid in urine	End of shift
Ethylbenzene CAS: 100-41-4	150 mg/g (NULL)	Sum of mandelic acid and phenylglyoxylic acid in urine	End of shift
Naphthalene CAS: 91-20-3	0.0025 mg/L	1-Hydroxypyrene in urine	End of shift at end of workweek
cadmium oxide (non-pyrophoric) CAS: 1306-19-0	0.005 mg/g (NULL)	Cadmium in urine	Not critical
Lead monoxide CAS: 1317-36-8	0.2 mg/L	Lead in blood	Not critical
Xylene CAS: 1330-20-7	1500 mg/g (NULL)	Methylhippuric acids in urine	End of shift

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

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)

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low -density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 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, with antistatic and fireproof properties	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	Replace boots at any sign of deterioration.

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

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:	Not available
Color:	Not available
Odor:	Not available
Odour threshold:	Not available *

Volatility:

Boiling point at atmospheric pressure:	194 ºF
Vapour pressure at 74 ºF:	9393 Pa

*Not available 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)

Vapour pressure at 122 ºF:	28566.16 Pa (28.57 kPa)
Evaporation rate at 74 ºF:	Not available *
Product description:	
Density at 74 ºF:	822.7 kg/m³
Relative density at 74 ºF:	0.823
Dynamic viscosity at 74 ºF:	Not available *
Kinematic viscosity at 74 ºF:	Not available *
Kinematic viscosity at 104 ºF:	<20.5 mm²/s
Concentration:	Not available *
pH:	Not available *
Vapour density at 74 ºF:	Not available *
Partition coefficient n-octanol/water 74 ºF:	Not available *
Solubility in water at 74 ºF:	Not available *
Solubility properties:	Not available *
Decomposition temperature:	Not available *
Melting point/freezing point:	Not available *
Flammability:	
Flash Point:	38 ºF
Flammability (solid, gas):	Not available *
Autoignition temperature:	453 ºF
Lower flammability limit:	Not available
Upper flammability limit:	Not available
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not available *
Oxidising properties:	Not available *
Corrosive to metals:	Not available *
Heat of combustion:	Not available *
Aerosols-total percentage (by mass) of flammable components:	Not available *
Other safety characteristics:	
Surface tension at 74 ºF:	Not available *
Refraction index:	Not available *

*Not available 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.

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SECTION 10: STABILITY AND REACTIVITY (continued)

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	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

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

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

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

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: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for consumption. For more information see section 3
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: 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.

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

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

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

- 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: Toluene (3); Benzene (1); Ethylbenzene (2B); Naphthalene (2B); Distillates (petroleum), hydrotreated light (3); cadmium oxide (non-pyrophoric) (1); Lead monoxide (2A); Xylene (3); Formaldehyde (1); Polychloroprene (3); disulfiram (3); Talc (3); Carbon black (2B)
- 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: 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.

F- Specific target organ toxicity (STOT) - single 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.

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- 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:

May be fatal if swallowed and enters airways.

Other information:

Not applicable (N/A)

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Toluene CAS: 108-88-3	LD50 oral	5580 mg/kg	Rat
	LD50 dermal	12124 mg/kg	Rat
	LC50 inhalation	28.1 mg/L (4 h)	Rat
n-hexane CAS: 110-54-3	LD50 oral	>5000 mg/kg	Mouse
	LD50 dermal	>5000 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L	
4-tert-butylphenol CAS: 98-54-4	LD50 oral	4000 mg/kg	Rat
	LD50 dermal	2288 mg/kg	Rabbit
	LC50 inhalation	>5 mg/L	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	>5000 mg/kg (Calculation method)	Non-applicable
Dermal	>5000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

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.

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Acute toxicity:

Identification	Concentration		Species	Genus
Toluene CAS: 108-88-3	LC50	5.5 mg/L (96 h)	Oncorhynchus kisutch	Fish
	EC50	3.78 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
	EC50	Not applicable (N/A)		
n-hexane CAS: 110-54-3	LC50	4 mg/L (96 h)	Carassius auratus	Fish
	EC50	Not applicable (N/A)		
	EC50	Not applicable (N/A)		
4-tert-butylphenol CAS: 98-54-4	LC50	5.14 mg/L (96 h)	Pimephales promelas	Fish
	EC50	4.8 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	11.2 mg/L (72 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
4-tert-butylphenol	NOEC	0.01 mg/L	Pimephales promelas	Fish
CAS: 98-54-4	NOEC	0.73 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
Toluene	BOD5	2.5 g O2/g	Concentration	100 mg/L
CAS: 108-88-3	COD	Not applicable (N/A)	Period	14 days
	BOD5/COD	Not applicable (N/A)	% Biodegradable	100 %
n-hexane	BOD5	Not applicable (N/A)	Concentration	100 mg/L
CAS: 110-54-3	COD	Not applicable (N/A)	Period	14 days
	BOD5/COD	Not applicable (N/A)	% Biodegradable	100 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Toluene	BCF	90
CAS: 108-88-3	Pow Log	2.73
	Potential	Moderate
n-hexane	BCF	542
CAS: 110-54-3	Pow Log	3.9
	Potential	High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Toluene	Koc	178	Henry	672.8 Pa·m³/mol
CAS: 108-88-3	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.793E-2 N/m (77 ºF)	Moist soil	Yes
n-hexane	Koc	150	Henry	185425 Pa·m³/mol
CAS: 110-54-3	Conclusion	High	Dry soil	Yes
	Surface tension	1.798E-2 N/m (77 ºF)	Moist soil	Yes
4-tert-butylphenol	Koc	Not applicable (N/A)	Henry	Not applicable (N/A)
CAS: 98-54-4	Conclusion	Not applicable (N/A)	Dry soil	Not applicable (N/A)
	Surface tension	2.306E-2 N/m (336.33 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: Ignitability. The next EPA hazardous waste number could apply: D001.
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.

- CONTINUED ON NEXT PAGE -

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

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

14.1 UN number: UN1133
14.2 UN proper shipping name: ADHESIVES
14.3 Transport hazard class(es): 3
Labels: 3
14.4 Packing group, if applicable: II
14.5 Marine pollutant: Yes
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: 5 L
Under 49 CFR 171.4, Except when transporting aboard a vessel, the requirements of this subchapter specific to marine pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars, and aircraft

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: UN1133
14.2 UN proper shipping name: ADHESIVES
14.3 Transport hazard class(es): 3
Labels: 3
14.4 Packing group, if applicable: II
14.5 Marine pollutant: Yes
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: Not applicable (N/A)
EmS Codes: F-E, S-D
Physico-Chemical properties: see section 9
Limited quantities: 5 L
Segregation group: Not applicable (N/A)

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: UN1133
14.2 UN proper shipping name: ADHESIVES
14.3 Transport hazard class(es): 3
Labels: 3
14.4 Packing group, if applicable: II
14.5 Marine pollutant: Yes
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

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SECTION 15: REGULATORY INFORMATION (continued)

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

- CALIFORNIA LABOR CODE - The Hazardous Substances List: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *4-tert-butylphenol (98-54-4)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *disulfiram (97-77-8)* ; *Talc (14807-96-6)* ; *Carbon black (1333-86-4)*
- California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Birth defects or other reproductive harm: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *Benzene (71-43-2)*
- California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Cancer: *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Formaldehyde (50-00-0)*
- CANADA-Domestic Substances List (DSL): *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Methylcyclopentane (96-37-7)* ; *Distillates (petroleum), hydrotreated light (64742-47-8)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *4-tert-butylphenol (98-54-4)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *Polychloroprene (9010-98-4)* ; *1,3-Butadiene, 2,3-dichloro-, polymer with 2-chloro-1,3-butadiene (25067-95-2)* ; *Chloroprene-sulfur copolymer (37450-42-3)* ; *Rosin (8050-09-7)* ; *disulfiram (97-77-8)* ; *Talc (14807-96-6)* ; *Carbon black (1333-86-4)* ; *Water (7732-18-5)*
- CANADA-Non-Domestic Substances List (NDSL): Not applicable (N/A)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantities: *Toluene (108-88-3) - U220* ; *n-hexane (110-54-3) - 5000 lb* ; *cyclohexane (110-82-7) - U056* ; *Benzene (71-43-2) - U019* ; *Ethylbenzene (100-41-4) - 1000 lb* ; *Naphthalene (91-20-3) - U165* ; *zinc oxide (1314-13-2) - 1 lb* ; *cadmium oxide (non-pyrophoric) (1306-19-0) - 1 lb* ; *Lead monoxide (1317-36-8) - 1 lb* ; *Xylene (1330-20-7) - U239* ; *Formaldehyde (50-00-0) - U122*
- Hazardous Air Pollutants (Clean Air Act): *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)*
- Massachusetts RTK - Substance List: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Methylcyclopentane (96-37-7)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *disulfiram (97-77-8)* ; *Talc (14807-96-6)* ; *Carbon black (1333-86-4)*
- Minnesota - Hazardous substances ERTK: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *Rosin (8050-09-7)* ; *disulfiram (97-77-8)* ; *Talc (14807-96-6)* ; *Carbon black (1333-86-4)*
- New Jersey Worker and Community Right-to-Know Act: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Methylcyclopentane (96-37-7)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *disulfiram (97-77-8)* ; *Talc (14807-96-6)* ; *Carbon black (1333-86-4)*
- New York RTK - Substance list: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Methylcyclopentane (96-37-7)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *disulfiram (97-77-8)*
- NTP (National Toxicology Program): *Benzene (71-43-2)* ; *Naphthalene (91-20-3)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Formaldehyde (50-00-0)*
- OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): *Benzene (71-43-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Formaldehyde (50-00-0)*
- Pennsylvania Worker and Community Right-to-Know Law: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Methylcyclopentane (96-37-7)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *disulfiram (97-77-8)* ; *Talc (14807-96-6)* ; *Carbon black (1333-86-4)*
- Rhode Island - Hazardous substances RTK: *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)*
- The Toxic Substances Control Act (TSCA) (USA, Puerto Rico): *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *Methylcyclopentane (96-37-7)* ; *Distillates (petroleum), hydrotreated light (64742-47-8)* ; *Magnesium oxide (1309-48-4)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *4-tert-butylphenol (98-54-4)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)* ; *Polychloroprene (9010-98-4)* ; *1,3-Butadiene, 2,3-dichloro-, polymer with 2-chloro-1,3-butadiene (25067-95-2)* ; *Chloroprene-sulfur copolymer (37450-42-3)* ; *Rosin (8050-09-7)* ; *disulfiram (97-77-8)* ; *Talc (14807-96-6)* ; *Carbon black (1333-86-4)* ; *Water (7732-18-5)*
- Toxic chemical release reporting under EPCRA section 313 (40 CFR Part 372): *Toluene (108-88-3)* ; *n-hexane (110-54-3)* ; *cyclohexane (110-82-7)* ; *Benzene (71-43-2)* ; *Ethylbenzene (100-41-4)* ; *Naphthalene (91-20-3)* ; *zinc oxide (1314-13-2)* ; *cadmium oxide (non-pyrophoric) (1306-19-0)* ; *Lead monoxide (1317-36-8)* ; *Xylene (1330-20-7)* ; *Formaldehyde (50-00-0)*

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SECTION 15: REGULATORY INFORMATION (continued)

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:

H315: Causes skin irritation.
H361: Suspected of damaging fertility or the unborn child.
H336: May cause drowsiness or dizziness.
H373: May cause damage to organs through prolonged or repeated exposure.
H304: May be fatal if swallowed and enters airways.
H225: Highly flammable liquid and vapour.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

29 CFR 1910.1200:

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Eye Dam. 1: H318 - Causes serious eye damage.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

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

Date of compilation: 4/12/2024

END OF SAFETY DATA SHEET