

Version: 2.1 Revision Date: 11/17/2022

This is a kit that contains the following components: DURAL AQUATIGHT 100 PLUS - PT B DURAL AQUATIGHT 100 PLUS- A BULK



Version: 2.1 Revision Date: 11/17/2022

## SAFETY DATA SHEET

## 1. Identification

#### Product identifier: DURAL AQUATIGHT 100 PLUS - PT B Product Code: 044MMPLUS 03

#### Recommended use and restriction on use

Recommended use: Curative Restrictions on use: Not known.

#### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY 19218 REDWOOD ROAD CLEVELAND OH 44110 US

#### Contact person: Telephone: Emergency telephone number:

EH&S Department 216-531-9222 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

## **Hazard Classification**

Health	Hazards

Acute toxicity (Oral)	Category 4
Acute toxicity (Inhalation - dust and mist)	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Skin sensitizer	Category 1
Toxic to reproduction	Category 2
Specific Target Organ Toxicity - Repeated Exposure	Category 2 <sup>1.</sup>

## Target Organs

1. Liver, Lung

## Unknown toxicity - Health

Acute toxicity, dermal	4 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	57 %

#### **Environmental Hazards**

Chronic hazards to the aquatic Category 1 environment

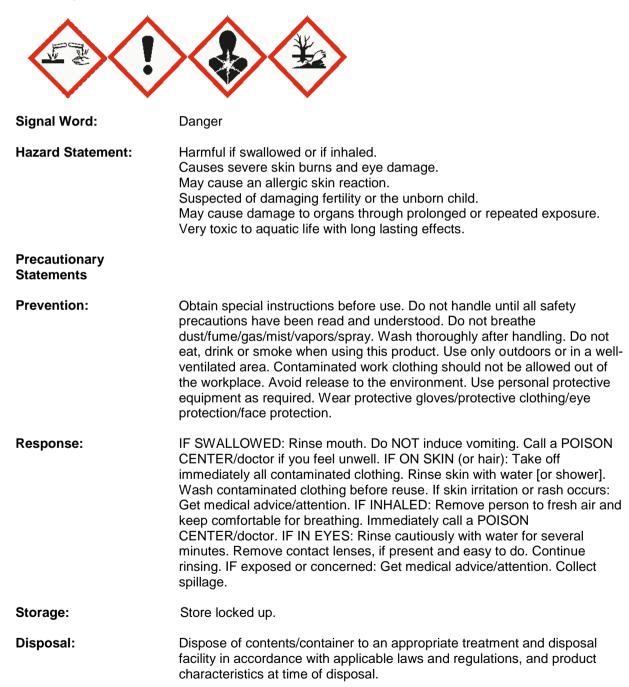
#### **Unknown toxicity - Environment**



Acute hazards to the aquatic 100 % environment 57 % environment

## Label Elements

Hazard Symbol:





## Hazard(s) not otherwise None. classified (HNOC):

## 3. Composition/information on ingredients

### **Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
m-Xylenediamine	1477-55-0	25 - <50%
4-tert-Butylphenol	98-54-4	25 - <50%
Cyclohexanamine, 4,4'-methylenebis-	1761-71-3	5 - <10%
2,2,4(or 2,4,4)-trimethylhexane-1,6- diamine	25513-64-8	1 - <5%
Formaldehyde, polymer with Benzeneamine, hydrogenated	135108-88-2	1 - <5%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

## Description of necessary first-aid measures

Inhalation:	Move to fresh air.		
Skin Contact:	Get medical attention if symptoms occur. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.		
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.		
Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.		
Personal Protection for First- aid Responders:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.		
Most important symptoms/effe	ffects, acute and delayed		
Symptoms:	Extreme irritation of eyes and mucous membranes, including burning and tearing.		
Hazards:	No data available.		
Indication of immediate medical attention and special treatment needed			
Treatment:	Symptoms may be delayed.		
5. Fire-fighting measures			
General Fire Hazards:	No unusual fire or explosion hazards noted.		



## Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.	
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.	
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.	
Special protective equipment and precautions for fire-fighters		
Special fire-fighting procedures:	No data available.	
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.	

Personal precautions, protective equipment and emergency procedures:	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
Accidental release measures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Methods and material for containment and cleaning up:	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.
7. Handling and storage	
Handling	
Technical measures (e.g. Local and general ventilation):	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
Safe handling advice:	Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.Do not taste or



Hygiene measures:	Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.
Storage	
Safe storage conditions:	Store locked up.
Safe packaging materials:	No data available.

## 8. Exposure controls/personal protection

## **Control Parameters**

## **Occupational Exposure Limits**

Chemical Identity	Туре	Exposure Limit Values	Source
m-Xylenediamine	Ceiling	0.018 ppm	US. ACGIH Threshold Limit Values, as amended (02 2020)

Chemical name	Туре	Exposure Limit Values	Source
m-Xylenediamine	CEILING	0.1 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
m-Xylenediamine	CEV	0.1 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
m-Xylenediamine	CEILING	0.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)

### Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

#### Individual protection measures, such as personal protective equipment

Eye/face protection:	Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.
Skin Protection Hand Protection:	Additional Information: Use suitable protective gloves if risk of skin contact.
Skin and Body Protection:	Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.



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## Hygiene measures:

Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

## 9. Physical and chemical properties

## Appearance

••	
Physical state:	liquid
Form:	liquid
Color:	Yellow
Odor:	Mild pungent
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	> 93 °C > 200 °F
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosi	ve limits
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	No data available.
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	0.95 - 1.05
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

## 10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.



Incompatible Materials:	Strong acids.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
11. Toxicological information	
Information on likely routes of e Inhalation:	<b>xposure</b> In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	May be harmful in contact with skin. May cause an allergic skin reaction.
Eye contact:	Causes serious eye damage.
Ingestion:	Harmful if swallowed.
Symptoms related to the physic	al, chemical and toxicological characteristics
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.
Information on toxicological effe	ects
Acute toxicity (list all possible	e routes of exposure)
Oral Product:	ATEmix: 995.78 mg/kg
Dermal Product:	ATEmix: 3,664.15 mg/kg
Inhalation Product:	ATEmix: 1.16 mg/l
Repeated dose toxicity Product:	No data available.
<b>Specified substance(s):</b> Cyclohexanamine, 4,4'- methylenebis-	NOAEL (Rat(Male), Oral, 28 d): 37.5 mg/kg Oral Experimental result, Supporting study NOAEL (Rat(Female, Male), Oral, 36 - 52 d): >= 15 mg/kg Oral Experimental result, Key study NOAEL (Rat(Female, Male), Inhalation): 12.2 mg/m3 Inhalation Read-across from supporting substance (structural analogue or surrogate), Key study NOAEL (Rat(Male), Oral, 10 - 28 d): 37.5 mg/kg Oral Experimental result, Supporting study NOAEL (Rat(Female, Male), Oral, 3 Months): 2.5 mg/kg Oral Read-across from supporting substance (structural analogue or surrogate), Key study 8/30



	2,2,4(or 2,4,4)- trimethylhexane-1,6- diamine Formaldehyde, polymer with Benzeneamine, hydrogenated	NOAEL (Rat(Female, Male), Oral, 13 Weeks): 10 mg/kg (Target Organ(s): Kidney) Oral Experimental result, Key study LOAEL (Rat(Female, Male), Oral, 13 Weeks): 60 mg/kg (Target Organ(s): Kidney) Oral Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 28 d): 15 mg/kg Oral Experimental result, Key study
	orrosion/Irritation duct:	No data available.
S	pecified substance(s): m-Xylenediamine	in vivo (Mouse): Corrosive , 4 h
	4-tert-Butylphenol	in vivo (Rabbit): Not Classified , 7 - 10 d
	Cyclohexanamine, 4,4'- methylenebis-	(Rabbit): Corrosive , 20 h
	Formaldehyde, polymer with Benzeneamine, hydrogenated	in vivo (Rabbit): Corrosive , 24 h
Pro	s Eye Damage/Eye Irritati oduct: pecified substance(s):	on No data available.
	4-tert-Butylphenol	Rabbit, 24 hrs: Category 1
	Cyclohexanamine, 4,4'- methylenebis-	Rabbit, 1 hrs: Category 1 Rabbit, 1 hrs: Category 1
Respiratory or Skin Sensitization   Product: No data available.		
	ogenicity oduct:	No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified		
US. National Toxicology Program (NTP) Report on Carcinogens: No carcinogenic components identified		
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended: No carcinogenic components identified		



## Germ Cell Mutagenicity

In vitro Product:	No data available.	
In vivo Product:	No data available.	
Reproductive toxicity Product:	Suspected of damaging fertility or the unborn child.	
Specific Target Organ Toxicity - Single Exposure     Product:   No data available.		
Specific Target Organ Toxicity - Repeated Exposure Product: No data available.		
<b>Target Organs</b> Specific Target Organ Toxicity - Repeated Exposure: Liver, Lung		
Aspiration Hazard Product:	No data available.	
Other effects:	No data available.	

## 12. Ecological information

## Ecotoxicity:

## Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Specified substance(s): m-Xylenediamine	LC 50 (Oryzias latipes, 96 h): 87.6 mg/l Experimental result, Key study
4-tert-Butylphenol	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 4.71 - 5.62 mg/l Mortality
2,2,4(or 2,4,4)- trimethylhexane-1,6- diamine	LC 50 (Leuciscus idus, 48 h): 174 mg/l Experimental result, Key study
Formaldehyde, polymer with Benzeneamine, hydrogenated	LC 50 (Poecilia reticulata, 96 h): 63 mg/l Experimental result, Key study

## **Aquatic Invertebrates**



Product:	No data available.
Specified substance(s): m-Xylenediamine	EC 50 (Daphnia magna, 48 h): 15.2 mg/l experimental result Experimental result, Key study
4-tert-Butylphenol	EC 50 (Daphnia magna, 48 h): 4.8 mg/l experimental result Experimental result, Key study
Cyclohexanamine, 4,4'- methylenebis-	EC 50 (Daphnia magna, 48 h): 6.84 mg/l experimental result Experimental result, Key study
2,2,4(or 2,4,4)- trimethylhexane-1,6- diamine	EC 50 (Daphnia magna, 24 h): 31.5 mg/l experimental result Experimental result, Key study
Formaldehyde, polymer with Benzeneamine, hydrogenated	EC 50 (Daphnia magna, 2 d): 15.4 mg/l experimental result Experimental result, Key study

## Chronic hazards to the aquatic environment:

Fish Product:	No data available.
Specified substance(s): 4-tert-Butylphenol	NOAEL (Pimephales promelas): 10 µg/l experimental result Experimental result, Key study
Aquatic Invertebrates Product:	No data available.
Specified substance(s): m-Xylenediamine	NOAEL (Daphnia magna): 4.7 mg/l experimental result Experimental result, Key study
4-tert-Butylphenol	NOAEL (Daphnia magna): 0.73 mg/l experimental result Experimental result, Key study
Toxicity to Aquatic Plants Product:	No data available.
Specified substance(s): Cyclohexanamine, 4,4'- methylenebis-	ErC 50 (Algae, 72 h): 141.42 - 200 mg/l Experimental result, Key study
Persistence and Degradability	
Biodegradation Product:	No data available.
Specified substance(s): m-Xylenediamine	49 % (28 d) Detected in water. Experimental result, Key study
4-tert-Butylphenol	60 % (28 d) Detected in water. Experimental result, Key study



Cyclohexanamine, 4,4'- methylenebis-	< 10 % (28 d) Detected in water. Experimental result, Weight of Evidence
methylenebis-	study
2,2,4(or 2,4,4)- trimethylhexane-1,6- diamine	7 % (28 d) Detected in water. Experimental result, Key study
BOD/COD Ratio Product:	No data available.
Bioaccumulative potential Bioconcentration Factor (BC Product:	<b>CF)</b> No data available.
Specified substance(s):	
4-tert-Butylphenol	Cyprinus carpio, Bioconcentration Factor (BCF): 44 - 48 Aquatic sediment Experimental result, Key study
Formaldehyde, polymer with Benzeneamine, hydrogenated	Cyprinus carpio, Bioconcentration Factor (BCF): > 209 - < 219 Aquatic sediment Experimental result, Key study
Partition Coefficient n-octanol / w Product:	<b>vater (log Kow)</b> No data available.
Mobility in soil:	No data available.
Other adverse effects:	Very toxic to aquatic life with long lasting effects.
13. Disposal considerations	
Disposal methods:	Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Contaminated Packaging:	No data available.

## 14. Transport information

## TDG:

UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (Modified Aliphatic Amine), 8, PG II

## CFR / DOT:

UN2735, Amines, liquid, corrosive, n.o.s. (Modified Aliphatic Amine), 8, PG II

## IMDG:

UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (Modified Aliphatic Amine), 8, PG II



## Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

## 15. Regulatory information

## **US Federal Regulations**

## TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

## US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended None present or none present in regulated quantities.

## CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard Acute toxicity (any route or exposure) Skin Corrosion or Irritation Serious eye damage or eye irritation Respiratory or Skin Sensitization Reproductive toxicity Specific target organ toxicity (single or repeated exposure)

# US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Not regulated.

## US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

## Chemical Identity % by weight

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) None present or none present in regulated quantities.

## Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

## **US State Regulations**

## US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

#### International regulations



## Montreal protocol

Not applicable

## Stockholm convention

Not applicable

## **Rotterdam convention**

Not applicable

## Kyoto protocol Not applicable

VOC.

Regulatory VOC (less water and exempt solvent)	:	0 g/l
VOC Method 310	:	0.00 %



Inventory Status: Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
Taiwan Chemical Substance Inventory:	One or more components in this



	product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.

## 16.Other information, including date of preparation or last revision

Revision Date:	11/17/2022
Version #:	2.1
Further Information:	No data available.
Disclaimer:	For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.



Version: 2.1 Revision Date: 11/17/2022

## SAFETY DATA SHEET

## 1. Identification

Product identifier: DURAL AQUATIGHT 100 PLUS- A BULK Product Code: 044MMPLUS 03

### Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

## Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY 19218 REDWOOD ROAD CLEVELAND OH 44110 US

#### Contact person: Telephone: Emergency telephone number:

EH&S Department 216-531-9222 1-800-424-9300 (US); 1-613-996-6666 (Canada)

## 2. Hazard(s) identification

## **Hazard Classification**

Health Ha	azards
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Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitizer	Category 1

## **Unknown toxicity - Health**

Acute toxicity, oral	17.97 %
Acute toxicity, dermal	27.95 %
Acute toxicity, inhalation, vapor	28.14 %
Acute toxicity, inhalation, dust or mist	27.95 %

#### **Environmental Hazards**

Acute hazards to the aquatic environment	Category 2
Chronic hazards to the aquatic	Category 2
environment	

## **Unknown toxicity - Environment**

Acute hazards to the aquatic	27.95 %
environment	
Chronic hazards to the aquatic	27.95 %
environment	



## Label Elements

**Hazard Symbol:** Signal Word: Warning Hazard Statement: Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects. Precautionary **Statements** Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eve protection/face protection. **Response:** Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing. If eye irritation persists: Get medical advice/attention. Collect spillage. **Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Hazard(s) not otherwise None. classified (HNOC):

## 3. Composition/information on ingredients

## Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	50 - <100%
Neopentyl glycol diglycidyl ether	17557-23-2	5 - <10%
Alkyl glycidyl ether	68609-97-2	5 - <10%
Petroleum distillates	64742-47-8	0.1 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

Description of necessary first-aid measures



Inhalation:	Move to fresh air.	
Skin Contact:	Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.	
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.	
Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.	
Personal Protection for First- aid Responders:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.	
Most important symptoms/effe	cts, acute and delayed	
Symptoms:	Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.	
Hazards:	No data available.	
Indication of immediate medica	al attention and special treatment needed	
Treatment:	Symptoms may be delayed.	
5. Fire-fighting measures		
5. The ingliting measures		
General Fire Hazards:	No unusual fire or explosion hazards noted.	
General Fire Hazards:		
General Fire Hazards: Suitable (and unsuitable) extin Suitable extinguishing	guishing media	
General Fire Hazards: Suitable (and unsuitable) extin Suitable extinguishing media: Unsuitable extinguishing	guishing media Use fire-extinguishing media appropriate for surrounding materials.	
General Fire Hazards: Suitable (and unsuitable) extin Suitable extinguishing media: Unsuitable extinguishing media: Specific hazards arising from the chemical:	guishing media Use fire-extinguishing media appropriate for surrounding materials. Do not use water jet as an extinguisher, as this will spread the fire.	
General Fire Hazards: Suitable (and unsuitable) extin Suitable extinguishing media: Unsuitable extinguishing media: Specific hazards arising from the chemical:	guishing media Use fire-extinguishing media appropriate for surrounding materials. Do not use water jet as an extinguisher, as this will spread the fire. During fire, gases hazardous to health may be formed.	
General Fire Hazards: Suitable (and unsuitable) extin Suitable extinguishing media: Unsuitable extinguishing media: Specific hazards arising from the chemical: Special protective equipment a Special fire-fighting	guishing media Use fire-extinguishing media appropriate for surrounding materials. Do not use water jet as an extinguisher, as this will spread the fire. During fire, gases hazardous to health may be formed. and precautions for fire-fighters No data available.	

## 6. Accidental release measures



Personal precautions, protective equipment and emergency procedures:	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
Accidental release measures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Methods and material for containment and cleaning up:	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.
7. Handling and storage	
7. Handling and storage Handling	
	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Contact avoidance measures:	No data available.
Hygiene measures:	Observe good industrial hygiene practices. Avoid contact with eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

Storage	
Safe storage conditions:	Store away from incompatible materials. Store in original tightly closed container.
Safe packaging materials:	No data available.

## 8. Exposure controls/personal protection

## **Control Parameters**

## **Occupational Exposure Limits**

Chemical Identity	Туре	Exposure Limit Values	Source
Petroleum distillates - Non- aerosol as total hydrocarbon vapor	TWA	200 mg/m3	US. ACGIH Threshold Limit Values, as amended (2008)
	TWA	200 mg/m3	US. ACGIH Threshold Limit Values, as amended (2008)



Chemical name	Туре	Exposure Limit Values	Source
Petroleum distillates	TWA	525 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (12 2007)
Petroleum distillates - Non- aerosol as total hydrocarbon vapor	TWA	200 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Biological Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Petroleum distillates - Non- aerosol as total hydrocarbon vapor	TWA	200 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	200 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)

Appropriate Engineering<br/>ControlsObserve good industrial hygiene practices. Observe occupational exposure<br/>limits and minimize the risk of inhalation of vapors and mist. Mechanical<br/>ventilation or local exhaust ventilation may be required.

## Individual protection measures, such as personal protective equipment

Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin Protection Hand Protection:	Additional Information: Use suitable protective gloves if risk of skin contact.
Skin and Body Protection:	Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Hygiene measures:	Observe good industrial hygiene practices. Avoid contact with eyes. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

## Appearance

Physical state:	liquid
Form:	liquid
Color:	Yellow
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	> 149 °C > 300 °F



Evaporation rate:	Slower than Ether	
Flammability (solid, gas):	No	
Upper/lower limit on flammability or explosive limits		
Flammability limit - upper (%):	No data available.	
Flammability limit - lower (%):	No data available.	
Explosive limit - upper:	No data available.	
Explosive limit - lower:	No data available.	
Vapor pressure:	No data available.	
Vapor density:	No data available.	
Relative density:	1.149	
Solubility(ies)		
Solubility in water:	Insoluble in water	
Solubility (other):	No data available.	
Partition coefficient (n-octanol/water):	No data available.	
Auto-ignition temperature:	No data available.	
Decomposition temperature:	No data available.	
Viscosity:	No data available.	

## 10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	Strong oxidizing agents.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
Hazardous Decomposition	Thermal decomposition or combustion may liberate carbon oxides and

## 11. Toxicological information

Information on likely routes of exposure		
Inhalation:	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.	
Skin Contact:	May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.	
Eye contact:	Causes serious eye irritation.	
Ingestion:	May be harmful if swallowed.	
Symptoms related to the physical, chemical and toxicological characteristics		
Inhalation:	No data available.	



Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.
Information on toxicological effect	cts
Acute toxicity (list all possible	routes of exposure)
Oral Product:	ATEmix: 2,004.63 mg/kg
Dermal Product:	ATEmix: 2,005.28 mg/kg
Inhalation Product:	
Specified substance(s): Bisphenol A Polyglycidyl Ether Resin	LC 50: > 20 mg/l LC 50: > 5 mg/l
Petroleum distillates	LC 50 (Rat): 5.3 mg/l
Repeated dose toxicity Product:	No data available.
Skin Corrosion/Irritation Product:	No data available.
<b>Specified substance(s):</b> Bisphenol A Polyglycidyl Ether Resin	in vivo (Rabbit): Moderately irritating , 24 h
Alkyl glycidyl ether	in vivo (Rabbit): Highly irritating , 5 d
Petroleum distillates	in vivo (Rabbit): Irritating , 24 - 72 h
Serious Eye Damage/Eye Irritatio Product: Specified substance(s):	on No data available.
Petroleum distillates	Rabbit, 24 - 72 hrs: Not irritant
Respiratory or Skin Sensitizatior Product:	n No data available.



Carcinogenicity Product:	No data available.		
	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified		
US. National Toxicology Progra No carcinogenic componen	m (NTP) Report on Carcinogens: ts identified		
US. OSHA Specifically Regulate No carcinogenic componen	ed Substances (29 CFR 1910.1001-1050), as amended: ts identified		
Germ Cell Mutagenicity			
In vitro Product:	No data available.		
In vivo Product:	No data available.		
Reproductive toxicity Product:	No data available.		
Specific Target Organ Toxicity Product:	- Single Exposure No data available.		
Specific Target Organ Toxicity Product:	- Repeated Exposure No data available.		
Aspiration Hazard Product:	No data available.		
Other effects:	No data available.		

## 12. Ecological information

**Ecotoxicity:** 

Acute hazards to the aquatic environment:

Fish Product:

No data available.

Specified substance(s):



Bisphenol A Polyglycidyl Ether Resin	LC 50 (Oncorhynchus mykiss, 96 h): 1.5 mg/l Experimental result, Key study
Alkyl glycidyl ether	LC 50 (Oncorhynchus mykiss, 96 h): > 5,000 mg/l Experimental result, Key study
Petroleum distillates	LL 50 (Oncorhynchus mykiss, 48 h): 23 mg/l Experimental result, Supporting study
Aquatic Invertebrates Product:	No data available.
Specified substance(s): Bisphenol A Polyglycidyl Ether Resin	EC 50 (Daphnia magna, 48 h): 1.1 mg/l experimental result Experimental result, Key study
Alkyl glycidyl ether	EC 50 (Daphnia magna, 48 h): 7.2 mg/l experimental result Experimental result, Key study
Petroleum distillates	EC 50 (Daphnia magna, 48 h): 1.4 mg/l experimental result Experimental result, Key study
Chronic hazards to the aquation	c environment:
Fish Product:	No data available.
Aquatic Invertebrates Product:	No data available.
Specified substance(s): Bisphenol A Polyglycidyl Ether Resin	NOAEL (Daphnia magna): 0.3 mg/l experimental result Experimental result, Key study
Petroleum distillates	NOAEL (Daphnia magna): 0.48 mg/l experimental result Experimental result, Key study
Toxicity to Aquatic Plants Product:	No data available.
Persistence and Degradability	

Biodegradation Product:	No data available.
<b>Specified substance(s):</b> Bisphenol A Polyglycidyl Ether Resin	82 % Detected in water. Experimental result, Key study
BOD/COD Ratio Product:	No data available.

## **Bioaccumulative potential**



Bioconcentration Factor (BC Product:	<b>F)</b> No data available.	
Specified substance(s): Bisphenol A Polyglycidyl Ether Resin	Bioconcentration Factor (BCF): 31 Aquatic sediment QSAR, Key study	
Alkyl glycidyl ether	Bioconcentration Factor (BCF): 160 - 263 Aquatic sediment QSAR, Key study	
Partition Coefficient n-octanol / w	vater (log Kow)	
Product:	No data available.	
<b>Specified substance(s):</b> Bisphenol A Polyglycidyl Ether Resin	Log Kow: 2.64 - 3.78 25 °C Yes Experimental result, Key study	
Mobility in soil:	No data available.	
Other adverse effects:	Toxic to aquatic life with long lasting effects.	
13. Disposal considerations		
Disposal methods:	Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.	
Contaminated Packaging:	No data available.	
	accordance with applicable laws and regulations, and product characteristics at time of disposal.	

## 14. Transport information

## TDG:

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Epoxy Resin), 9, PG III

## CFR / DOT:

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Epoxy Resin), 9, PG III

## IMDG:

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Epoxy Resin), 9, PG III, MARINE POLLUTANT

## **Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

15. Regulatory information	



#### US Federal Regulations TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

## US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended None present or none present in regulated quantities.

## CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Immediate (Acute) Health Hazards Skin Corrosion or Irritation Serious eye damage or eye irritation Respiratory or Skin Sensitization

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Not regulated.

## US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

#### Chemical Identity % by weight

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) None present or none present in regulated quantities.

## Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

## **US State Regulations**

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

## International regulations

## Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

## Rotterdam convention

Not applicable

Kyoto protocol Not applicable



## VOC:

Regulatory VOC (less water and exempt solvent)	:	2 g/l
VOC Method 310	:	0.18 %



Inventory Status: Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
Taiwan Chemical Substance Inventory:	One or more components in this



	product are not listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.

## 16.Other information, including date of preparation or last revision

Revision Date:	11/17/2022
Version #:	2.1
Further Information:	No data available.
Disclaimer:	For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.