

This is a kit that contains the following components: DURALFLEX LV CONCRETE GRAY 1:1 PART A DURALFLEX LV 1:1 PART B



Version: 3.0 Revision Date: 09/08/2023

SAFETY DATA SHEET

1. Identification

Product identifier: DURALFLEX LV CONCRETE GRAY 1:1 PART A Product Code: TD5344104520

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Euclid Admixture Canada Inc. 2835 Grand-Allee Saint Hubert QC J4T 2R4 CA

Contact person: Telephone: Emergency telephone number:

EH&S Department (450)465-2233 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Serious Eye Damage/Eye Irritation	Category 2B
Skin sensitizer	Category 1
Carcinogenicity	Category 2

Unknown toxicity - Health

Acute toxicity, oral	1.75 %
Acute toxicity, dermal	5.02 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust	99.11 %
or mist	

Label Elements

Hazard Symbol:





Signal Word:	Warning
Hazard Statement:	Causes eye irritation. May cause an allergic skin reaction. Suspected of causing cancer.
Precautionary Statements	
Prevention:	Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse.
Storage:	Store locked up.
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 classified (HNOC):	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	50 - <100%
Titanium dioxide	13463-67-7	1 - <5%
o-Cresyl glycidyl ether	2210-79-9	0.1 - <1%
Aluminum hydroxide	21645-51-2	0.1 - <1%
Amorphous silica	7631-86-9	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:	If skin irritation occurs: Get medical advice/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:	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/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:	May cause skin and eye irritation.
Hazards:	No data available.
Indication of immediate medica	I 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) exting	guishing 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 a	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
for me-inginers.	worn in case of fire.

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.
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:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment

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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:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after handling. Avoid contact with eyes, skin, and clothing.Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Contact avoidance measures:	No data available.
Hygiene measures:	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. 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
Titanium dioxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Titanium dioxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Titanium dioxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Titanium dioxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)



Titanium dioxide - Total dust.	TWA	50 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (03 2016)
		cubic foot of	
		air	
Titanium dioxide - Respirable	TWA	2.5 mg/m3	US. ACGIH Threshold Limit Values, as
finescale particles		- 3	amended (01 2022)
Titanium dioxide - Respirable	TWA	0.2 mg/m3	US. ACGIH Threshold Limit Values, as
nanoscale particles		0. <u> </u>	amended (01 2022)
Aluminum hydroxide -	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as
Respirable fraction.		r mg/me	amended (2011)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
	1004	5 mg/m5	amended (03 2016)
Aluminum hydroxide - Total	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
dust.	IWA	15 119/115	amended (03 2016)
dusi.	TWA	50 millions of	
	IVVA		US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (03 2016)
		cubic foot of	
		air	
Aluminum hydroxide -	TWA	15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Respirable fraction.		particles per	amended (03 2016)
		cubic foot of	
		air	
Aluminum hydroxide -	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as
Inhalable particles.			amended (01 2021)
Aluminum hydroxide -	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as
Respirable particles.			amended (01 2021)
Amorphous silica - Inhalable	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as
particles.		-	amended (01 2021)
Amorphous silica -	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as
Respirable particles.		Ũ	amended (01 2021)
Amorphous silica -	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Respirable fraction.		0g,o	amended (09 2016)
Amorphous silica - Total	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
dust.	1	To thg/tho	amended (09 2016)
4451.	TWA	50 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (09 2016)
		cubic foot of	
Amorphous silica -	TWA	air 15 millions of	
	IWA		US. OSHA Table Z-3 (29 CFR 1910.1000), as
Respirable fraction.		particles per	amended (09 2016)
		cubic foot of	
A 1 11		air	
Amorphous silica	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
			amended (09 2016)
	TWA	20 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (09 2016)
		cubic foot of	
		air	

Chemical name	Туре	Exposure Limit Values	Source
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Titanium dioxide - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Titanium dioxide	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)



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, s	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. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

9. Physical and chemical properties

Physical state:liquidForm:liquidColor:GrayOdor:MildOdor threshold:No data available.pH:No data available.Initial boiling point and boiling range:No data available.
Color:GrayOdor:MildOdor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.
Odor:MildOdor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.
Odor threshold:No data available.pH:No data available.Melting point/freezing point:No data available.
pH:No data available.Melting point/freezing point:No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range:
initial boining point and boining range. No data available.
Flash Point:> 93 °C > 200 °F(Setaflash Closed Cup)
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:Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density: 1.17
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:	No data available.
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 ex Inhalation:	posure In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.	
Skin Contact:	May be harmful in contact with skin. Causes mild skin irritation. May cause an allergic skin reaction.	
Eye contact:	Causes eye irritation.	
Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.	
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 offer	cte	

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	

Not classified for acute toxicity based on available data.



Specified substance(s): Bisphenol A Polyglycidyl Ether Resin	LD 50 (Rat): > 2,000 mg/kg
Titanium dioxide	LD 50 (Rat): > 5,000 mg/kg
o-Cresyl glycidyl ether	LD 50 (Rat): > 5,000 mg/kg
Aluminum hydroxide	LD 50 (Rat): > 2,000 mg/kg
Amorphous silica	LD 50 (Rat): > 6,350 mg/kg
Dermal Product:	ATEmix: 3,393.5 mg/kg
Inhalation Product:	Not classified for acute toxicity based on available data.
Specified substance(s): Bisphenol A Polyglycidyl Ether Resin	LC 50: > 20 mg/l LC 50: > 5 mg/l
Titanium dioxide	LC 50 (Rat): 3.43 mg/l
o-Cresyl glycidyl ether	LC 50 (Rat): 6,090 mg/m3
Aluminum hydroxide	LC 50 (Rat): 7.6 mg/l
Amorphous silica	LC 50 (Rat): > 2.08 mg/l
Repeated dose toxicity Product:	No data available.
Skin Corrosion/Irritation Product:	No data available.
Specified substance(s):	



Bisphenol A Polyglycidyl Resin	(abbit): Moderately irritating , 24 h
Titanium dio	kide in vivo (F	Rabbit): Not irritant , 24 h
o-Cresyl glyc	idyl ether in vivo (F	Rabbit): Not irritant , 7 d
Aluminum hy	droxide in vivo (F	Rabbit): Not classified as an Irritant , 24 - 72 h
Amorphous s	silica in vivo (F	Rabbit): Not irritant , 48 h
Serious Eye Damage Product:	•	available.

Specified substance(s):

Titanium dioxide	Rabbit, 24 - 72 h: Not irritant
Aluminum hydroxide	Rabbit, 24 - 72 h: Not irritant
Amorphous silica	Rabbit, 24 - 72 h: Not irritant

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity	
Product:	

Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens: No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended: No carcinogenic components 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	- Single Exposure
Product:	No data available.
Specific Target Organ Toxicity	- Repeated Exposure
Product:	No data available.
Aspiration Hazard Product:	No data available.
Other effects:	Constituents of this product may include crystalline silica which, if in inhalable form, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimis exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

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
Titanium dioxide	LC 50 (Pimephales promelas, 96 h): 8.2 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
o-Cresyl glycidyl ether	LC 50 (Oncorhynchus mykiss, 96 h): 2.8 - 5.1 mg/l Experimental result, Key study
Aluminum hydroxide	LC 50 (Oncorhynchus mykiss, 96 h): 7.4 mg/l Experimental result, Weight of Evidence 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



Titanium dioxide	LC 50 (Daphnia magna, 48 h): > 100 mg/l experimental result Experimental result, Weight of Evidence study
o-Cresyl glycidyl ether	EC 50 (Daphnia magna, 48 h): 3.3 mg/l experimental result Experimental result, Key study
Aluminum hydroxide	EC 50 (Ceriodaphnia dubia, 48 h): 1.5 mg/l experimental result Experimental result, Weight of Evidence study
Chronic hazards to the aquation	c environment:
Fish Product:	No data available.
Specified substance(s): Aluminum hydroxide	NOAEL (Pimephales promelas): 0.16 mg/l read-across based on grouping of substances (category approach) Read-across based on grouping of substances (category approach), Weight of Evidence study
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
Titanium dioxide	NOAEL (Daphnia magna): 100 mg/l experimental result Experimental result, Supporting study
Aluminum hydroxide	NOAEL (Daphnia magna): 0.076 mg/l experimental result Experimental result, Weight of Evidence study
Toxicity to Aquatic Plants Product:	No data available.
Persistence and Degradability	
Biodegradation Product:	No data available.
Specified substance(s): Bisphenol A Polyglycidyl Ether Resin	82 % Detected in water. Experimental result, Key study
o-Cresyl glycidyl ether	11 - 17 % (28 d) Detected in water. Experimental result, Key study
BOD/COD Ratio Product:	No data available.
Bioaccumulative potential Bioconcentration Factor (BC Product:	F) No data available.
Specified substance(s):	



Bisphenol A Polyglycidyl Ether Resin	Bioconcentration Factor (BCF): 31 Aquatic sediment QSAR, Key study
Partition Coefficient n-octanol / v Product:	vater (log Kow) No data available.
Specified substance(s): 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:	No data available.
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:	
Not Regulated	
CFR / DOT:	

Not Regulated

IMDG:

Not Regulated

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 1910.1001-1053), as amended None present or none present in regulated quantities.



CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
Methanol
Butyl acetate

Reportable quantity 5000 lbs. 5000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

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

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

For more information go to www.P65Warnings.ca.gov.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC: When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

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



Inventory Status: Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EC Inventory:	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.
China Inv. Existing Chemical Substances:	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.
Canada NDSL Inventory:	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.
US TSCA Inventory:	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.
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.



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

Revision Date:	09/08/2023
Version #:	3.0
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: 3.0 Revision Date: 09/08/2023

SAFETY DATA SHEET

1. Identification

Product identifier: DURALFLEX LV 1:1 PART B Product Code: TD5344104520

Recommended use and restriction on use

Recommended use: Curative Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Euclid Admixture Canada Inc. 2835 Grand-Allee Saint Hubert QC J4T 2R4 CA

Contact person: Telephone: Emergency telephone number:

EH&S Department (450)465-2233 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Category 4
Category 4
Category 1B
Category 1
Category 1
Category 2

Unknown toxicity - Health

Acute toxicity, oral	18.2 %
Acute toxicity, dermal	72.16 %
Acute toxicity, inhalation, vapor	99.99 %
Acute toxicity, inhalation, dust	100 %
or mist	

Environmental Hazards

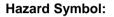
Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 1

Unknown toxicity - Environment



Acute hazards to the aquatic	20.55 %
environment	
Chronic hazards to the aquatic	17.49 %
environment	

Label Elements







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

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
4-Nonylphenol	84852-15-3	25 - <50%
Poly(oxypropylene) diamine	9046-10-0	10 - <25%
Tris(dimethylaminomethyl)phenol	90-72-2	5 - <10%
Tetraethylene pentamine	112-57-2	3 - <5%
Diethylenetriamine	111-40-0	1 - <3%
Bisphenol A	80-05-7	0.3 - <1%
1,2,4-Trimethylbenzene	95-63-6	0 - <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:	Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.	
Skin Contact:	Call a physician or poison control center immediately. 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:	Rinse mouth. Call a physician or poison control center immediately. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.	
Personal Protection for First- aid Responders:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.	
Most important symptoms/effects, acute and delayed		
Symptoms:	Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. 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.	
6. Accidental release measures	S	
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:	Do not taste or swallow. Wash hands thoroughly after handling. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes, on skin, on clothing. Avoid contact with eyes, skin, and clothing.Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Contact avoidance measures:	No data available.
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. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product. 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
Diethylenetriamine	TWA	1 ppm		US. ACGIH Threshold Limit Values, as amended (2008)
1,2,4-Trimethylbenzene	REL	25 ppm	125 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	TWA	25 ppm	125 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	10 ppm		US. ACGIH Threshold Limit Values, as amended (01 2022)

Chemical name	Туре	Exposure Limit V	alues/	Source
Diethylenetriamine	TWA	1 ppm		Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Diethylenetriamine	TWA	1 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Diethylenetriamine	TWA	1 ppm 4	4.2 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)



	Chemical name	Туре	Exposure Limit Values	Source
	Diethylenetriamine	TWA	1 ppm	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
	Diethylenetriamine	TWA	1 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	Diethylenetriamine	TWA	1 ppm 4.2 mg/	m3 Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	Ethylene diamine	TWA	10 ppm	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
	Ethylene diamine	TWA	10 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	Ethylene diamine	TWA	10 ppm 25 mg/	m3 Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Indiv	opriate Engineering ontrols ridual protection measur face protection:	limits a ventilat r es, such as Wear a	nd minimize the risk of in ion or local exhaust vent personal protective equ	
-	Protection I Protection:	Additio	nal Information: Use suita	able protective gloves if risk of skin contact.
Skin	and Body Protection:	footwea Contac	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.	
Resp	piratory Protection:		e of inadequate ventilation upervisor.	n use suitable respirator. Seek advice from
Hygi	ene measures:	when u not har Obtain reuse. breaks	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. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product. 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:	Amber
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(Setaflash Closed Cup)
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:	0.959
Solubility(ies)	
Solubility in water:	Practically Insoluble
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:	Avoid contact with 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 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 severe skin burns. May cause an allergic skin reaction.
Eye contact:	Causes serious eye damage.
Ingestion:	Harmful if swallowed.
Symptoms related to the physica	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	cts
Acute toxicity (list all possible	e routes of exposure)
Oral Product:	ATEmix: 1,559.6 mg/kg
Dermal Product:	ATEmix: 2,742.43 mg/kg
Inhalation Product:	ATEmix: 1.5 mg/l
Repeated dose toxicity Product:	No data available.
Skin Corrosion/Irritation Product:	No data available.
Specified substance(s): 4-Nonylphenol	in vivo (Rabbit): Irritating , 1 - 8 d
Poly(oxypropylene) diamine	in vivo (Rabbit): Corrosive , 48 - 72 h
Tris(dimethylaminomet hyl)phenol	in vivo (Rabbit): Corrosive
1,2,4-Trimethylbenzene	in vivo (Rabbit): Irritating , 24 - 72 h



Serious Eye Damage/Eye Irritatio Product: Specified substance(s):	on No data available.
4-Nonylphenol	Rabbit, 24 - 72 h: Corrosive
Poly(oxypropylene) diamine	Rabbit, 24 h: Corrosive
1,2,4-Trimethylbenzene	Rabbit, 30 min: Not irritant
Respiratory or Skin Sensitization Product:	n No data available.
Carcinogenicity Product:	No data available.
IARC Monographs on the Evalua No carcinogenic components	ation of Carcinogenic Risks to Humans: s identified
US. National Toxicology Program No carcinogenic components	
US. OSHA Specifically Regulated No carcinogenic components	d Substances (29 CFR 1910.1001-1053), as amended: s 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 - 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): 4-Nonylphenol	EC 50 (Pimephales promelas, 96 h): 96 μg/l Experimental result, Key study
Poly(oxypropylene) diamine	LC 50 (Cyprinodon variegatus, 96 h): 772.14 mg/l Experimental result, Key study
Tris(dimethylaminomethyl))phenol	LC 50 (Cyprinus carpio, 96 h): 175 mg/l Experimental result, Weight of Evidence study
Diethylenetriamine	LC 50 (Poecilia reticulata, 96 h): 0.43 g/l Experimental result, Key study
Bisphenol A	LC 50 (Pimephales promelas, 96 h): 4.6 mg/l Experimental result, Key study
1,2,4-Trimethylbenzene	LC 50 (Pimephales promelas, 96 h): 7.72 mg/l Experimental result, Key study
Aquatic Invertebrates Product:	No data available.
	No data available. EC 50 (Daphnia magna, 48 h): 84.4 µg/l experimental result Experimental result, Key study
Product: Specified substance(s):	EC 50 (Daphnia magna, 48 h): 84.4 μg/l experimental result Experimental
Product: Specified substance(s): 4-Nonylphenol Poly(oxypropylene)	EC 50 (Daphnia magna, 48 h): 84.4 μg/l experimental result Experimental result, Key study EC 50 (Daphnia magna, 48 h): 80 mg/l experimental result Experimental
Product: Specified substance(s): 4-Nonylphenol Poly(oxypropylene) diamine	EC 50 (Daphnia magna, 48 h): 84.4 μg/l experimental result Experimental result, Key study EC 50 (Daphnia magna, 48 h): 80 mg/l experimental result Experimental result, Key study EC 50 (Daphnia magna, 48 h): 16 mg/l experimental result Experimental

Chronic hazards to the aquatic environment:

Fish Product:	No data available.
Specified substance(s):	NOAEL (Oncorhynchus mykiss): 0.006 mg/l experimental result
4-Nonylphenol	Experimental result, Key study



Diethylenetriamine	NOAEL (Gasterosteus aculeatus): > 10 mg/l experimental result Experimental result, Key study
Bisphenol A	NOAEL (Pimephales promelas): 640 µg/l experimental result Experimental
	result, Key study
Aquatic Invertebrates Product:	No data available.
Specified substance(s): 4-Nonylphenol	NOAEL (Daphnia magna): 0.024 mg/l experimental result Experimental result, Key study
Diethylenetriamine	NOAEL (Daphnia magna): 5.6 mg/l experimental result Experimental result, Key study
Bisphenol A	NOAEL (Daphnia magna): 1 mg/l experimental result Experimental result, Supporting study
Toxicity to Aquatic Plants Product:	No data available.
Persistence and Degradability	
Biodegradation Product:	No data available.
Specified substance(s): 4-Nonylphenol	48.2 % (35 d) Detected in water. Experimental result, Key study
Tris(dimethylaminomethyl))phenol	4 % (28 d) Detected in water. Experimental result, Key study
Diethylenetriamine	87 % Detected in water. Experimental result, Key study
Bisphenol A	89 % (28 d) Detected in water. Experimental result, Key study
BOD/COD Ratio Product:	No data available.
Bioaccumulative potential Bioconcentration Factor (BC Product:	F) No data available.
Specified substance(s): 4-Nonylphenol	Pimephales promelas, Bioconcentration Factor (BCF): 740 Aquatic sediment Experimental result, Key study
Diethylenetriamine	Cyprinus carpio, Bioconcentration Factor (BCF): > 2.8 - 6.3 Aquatic sediment Experimental result, Key study
Bisphenol A	Cyprinus carpio, Bioconcentration Factor (BCF): 20 - 67 Aquatic sediment Experimental result, Key study



1,2,4-Trimethylbenzene	Pimephales promelas, Bioconcentration Factor (BCF): 243 Aquatic sediment QSAR, Key study
Partition Coefficient n-octanol / v Product:	vater (log Kow) No data available.
Specified substance(s): Tetraethylene pentamine	Log Kow: 1.503
Bisphenol A	Log Kow: 3.32 Log Kow: 3.32
1,2,4-Trimethylbenzene	Log Kow: 3.78
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:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nonylphenol), 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)



Chemical Identity 4-Nonylphenol

Reportable quantity

De minimis concentration: TSCA 5(a)(2)% One-Time Export Notification only.

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 1910.1001-1053), as amended None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity Reportable quantity

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

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	<u>% by weight</u>
4-Nonylphenol	1.0%

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



WARNING Reproductive Harm - www.P65Warnings.ca.gov

International regulations

Montreal protocol Not applicable



Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol Not applicable

VOC: When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 68 g/l

Regulatory VOC (less water and exempt solvent)	:	135 g/l
VOC Method 310	:	46.70 %



Inventory Status: EC Inventory:	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.
China Inv. Existing Chemical Substances:	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.
Canada NDSL Inventory:	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.
New Zealand Inventory of Chemicals:	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.
Australia Industrial Chem. Act (AIIC):	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are 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.
Mexico INSQ:	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.
Switzerland New Subs Notified/Registered:	One or more components in this product are not listed on or exempt from the Inventory.
Thailand DIW Existing Chemical Inv. List:	One or more components in this product are not listed on or exempt from the Inventory.
Vietnam National Chemical Inventory:	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:	09/08/2023
Version #:	3.0
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.