

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : 20-3001CCL

1.2. Recommended use and restrictions on use

Recommended use : Potting compound
Restrictions on use : Not to be used for any purpose other than the one the product was designed for

1.3. Supplier

Epoxies, Etc.
21 Starline Way
Cranston, RI 02921
USA
T 401-946-5564
www.epoxies.com

1.4. Emergency telephone number

Emergency number : VelocityEHS: +1 (800) 255-3924, +1 (813) 248-0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Skin corrosion/irritation Category 1B	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Reproductive toxicity Category 2	H361	Suspected of damaging fertility or the unborn child
Hazardous to the aquatic environment – Acute Hazard Category 1	H400	Very toxic to aquatic life
Hazardous to the aquatic environment – Chronic Hazard Category 1	H410	Very toxic to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H361 - Suspected of damaging fertility or the unborn child
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (GHS US) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P302+P352 - If on skin: Wash with plenty of water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a poison center or doctor.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Harmful dust may be released during cutting, milling or grinding process.

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Phenol, 4-nonyl-, branched	CAS-No.: 84852-15-3	≥ 30	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Polyoxypropylenediamine	CAS-No.: 9046-10-0	10 – 60	Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412
Cyclic Ethyleneamine	CAS-No.: 140-31-8	≥ 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS US classification
Phenol, 2-nonyl-, branched	CAS-No.: 91672-41-2	1 – 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Diethylenetriamine	CAS-No.: 111-40-0	< 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335

Comments : Components not listed are either non-hazardous or are below reportable limits.
*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret
Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness.
Symptoms/effects after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.
Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

20-3001CCL

No additional information available

Polyoxypropylenediamine (9046-10-0)

No additional information available

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Phenol, 4-nonyl-, branched (84852-15-3)

No additional information available

Phenol, 2-nonyl-, branched (91672-41-2)

No additional information available

Diethylenetriamine (111-40-0)

USA - ACGIH - Occupational Exposure Limits

Local name	Diethylenetriamine
ACGIH OEL TWA [ppm]	1 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr. Notations: Skin
Regulatory reference	ACGIH 2022

Cyclic Ethyleneamine (140-31-8)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves resistant to chemical penetration. Neoprene or nitrile rubber gloves. Butyl-rubber protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Refer to manufacturer's information. Gloves must be replaced after each use and whenever signs of wear or perforation appear

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: According to product specification
Odor	: Amine-like
Odor threshold	: No data available
pH	: No data available

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

20-3001CCL

ATE US (oral)	789.797 mg/kg body weight
---------------	---------------------------

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Polyoxypropylenediamine (9046-10-0)	
LD50 oral rat	2885 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	2980 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 0.74 mg/l air (Equivalent or similar to OECD 403, 8 h, Rat, Male / female, Experimental value, Inhalation (vapours))
ATE US (oral)	2885 mg/kg body weight
ATE US (dermal)	2980 mg/kg body weight
Phenol, 4-nonyl-, branched (84852-15-3)	
LD50 oral rat	1412 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	580 mg/kg
LD50 dermal rabbit	3160 mg/kg Source: ChemIDPlus
LD50 dermal	2037 mg/kg
ATE US (oral)	580 mg/kg body weight
ATE US (dermal)	2037 mg/kg body weight
Phenol, 2-nonyl-, branched (91672-41-2)	
ATE US (oral)	500 mg/kg body weight
Diethylenetriamine (111-40-0)	
LD50 oral rat	1553 mg/kg body weight (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	1080 mg/kg
LD50 dermal rabbit	1045 mg/kg body weight (Rabbit, Experimental value, Dermal)
LD50 dermal	1040 mg/kg
ATE US (oral)	1080 mg/kg body weight
ATE US (dermal)	1040 mg/kg body weight
ATE US (gases)	100 ppmV/4h
ATE US (vapors)	0.5 mg/l/4h
ATE US (dust, mist)	0.05 mg/l/4h
Cyclic Ethyleneamine (140-31-8)	
LD50 oral rat	2097 mg/kg body weight (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 oral	1470 mg/kg
LD50 dermal rabbit	866 mg/kg bw/day (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LD50 dermal	880 mg/kg
ATE US (oral)	1470 mg/kg body weight
ATE US (dermal)	866 mg/kg body weight
Skin corrosion/irritation : Causes severe skin burns.	
Phenol, 4-nonyl-, branched (84852-15-3)	
pH	No data available in the literature

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Cyclic Ethyleneamine (140-31-8)	
pH	11.5
Serious eye damage/irritation	: Causes serious eye damage.
Phenol, 4-nonyl-, branched (84852-15-3)	
pH	No data available in the literature
Cyclic Ethyleneamine (140-31-8)	
pH	11.5
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Phenol, 4-nonyl-, branched (84852-15-3)	
NOAEL (animal/female, F0/P)	15 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study), Remarks on results: other:Generation: All generations tested: F0, F1, F2, F3 (migrated information)
NOAEL (animal/male, F1)	15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: other:EPA OPPTS 837.3800 (US EPA OPPTS 1998)
STOT-single exposure	: Not classified
Diethylenetriamine (111-40-0)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Phenol, 4-nonyl-, branched (84852-15-3)	
LOAEL (oral,rat,90 days)	400 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
NOAEL (oral,rat,90 days)	100 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
Diethylenetriamine (111-40-0)	
LOAEL (oral,rat,90 days)	530 – 620 mg/kg body weight Animal: rat, Guideline: other:OECD Guideline for Testing of Chemicals, No. 451, May 12, 1981
NOAEL (oral,rat,90 days)	70 – 80 mg/kg body weight Animal: rat, Guideline: other:OECD Guideline for Testing of Chemicals, No. 451, May 12, 1981
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Polyoxypropylenediamine (9046-10-0)	
Viscosity, kinematic	10.9 mm²/s (20 °C, OECD 114: Viscosity of Liquids)
Phenol, 4-nonyl-, branched (84852-15-3)	
Viscosity, kinematic	No data available in the literature
Diethylenetriamine (111-40-0)	
Viscosity, kinematic	5.268 mm²/s
Cyclic Ethyleneamine (140-31-8)	
Viscosity, kinematic	No data available in the literature
Symptoms/effects	: May cause drowsiness or dizziness.

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/effects after inhalation	: May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Polyoxypropylenediamine (9046-10-0)	
LC50 - Fish [1]	772.14 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Cyprinodon variegatus, Static system, Salt water, Experimental value, GLP)
EC50 - Crustacea [1]	80 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	15 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

Phenol, 4-nonyl-, branched (84852-15-3)	
LC50 - Fish [1]	0.08 mg/l (ASTM E729-96, 96 h, Hybopsis monacha, Static system, Fresh water, Experimental value)
EC50 - Crustacea [1]	0.084 mg/l (ASTM E729-88, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, Lethal)
EC50 72h - Algae [1]	0.33 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	0.027 mg/l
NOEC chronic fish	0.006 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '91 d'

Diethylenetriamine (111-40-0)	
LC50 - Fish [1]	430 mg/l (EU Method C.1, 96 h, Poecilia reticulata, Semi-static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	64.6 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [2]	16 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	187 mg/l Source: ECHA
ErC50 algae	1164 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Selenastrum capricornutum, Static system, Fresh water, Experimental value, GLP)
LOEC (chronic)	11.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	5.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 10 mg/l Test organisms (species): Gasterosteus aculeatus Duration: '28 d'
NOEC chronic crustacea	5.6 mg/l

Cyclic Ethyleneamine (140-31-8)	
LC50 - Fish [1]	2190 mg/l (96 h, Pimephales promelas, Static system, Fresh water, Experimental value)

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Cyclic Ethyleneamine (140-31-8)	
EC50 - Crustacea [1]	58 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, GLP)
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Polyoxypropylenediamine (9046-10-0)	
Not rapidly degradable	
Persistence and degradability	Not readily biodegradable in water.
Phenol, 4-nonyl-, branched (84852-15-3)	
Not rapidly degradable	
Persistence and degradability	Biodegradability in soil: no data available. Inherently biodegradable.
Diethylenetriamine (111-40-0)	
Not rapidly degradable	
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
Cyclic Ethyleneamine (140-31-8)	
Not rapidly degradable	
Persistence and degradability	Not readily biodegradable in water.
Chemical oxygen demand (COD)	0.56 g O ₂ /g substance

12.3. Bioaccumulative potential

Polyoxypropylenediamine (9046-10-0)	
Partition coefficient n-octanol/water (Log Pow)	1.34 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Phenol, 4-nonyl-, branched (84852-15-3)	
BCF - Fish [1]	1200 – 1300 (Equivalent or similar to OECD 305, 16 day(s), Gasterosteus aculeatus, Flow-through system, Salt water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	5.4 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 23 °C)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
Diethylenetriamine (111-40-0)	
BCF - Fish [1]	0.3 – 6.3 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-1.58 (Calculated, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Cyclic Ethyleneamine (140-31-8)	
BCF - Fish [1]	0.3 – 6.3 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	-1.48 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Polyoxypropylenediamine (9046-10-0)	
Surface tension	Data waiving
Ecology - soil	No (test)data on mobility of the substance available.

Phenol, 4-nonyl-, branched (84852-15-3)	
Surface tension	38.9 mN/m (20 °C, EU Method A.5: Surface tension)
Ecology - soil	Adsorbs into the soil.

Diethylenetriamine (111-40-0)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.4 – 4.6 (log Koc, Other, Experimental value, GLP)
Ecology - soil	Adsorbs into the soil. Low potential for mobility in soil. Soil contaminant.

Cyclic Ethyleneamine (140-31-8)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.57 (log Koc, Read-across, GLP)
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information





In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
1760	UN1760	1760	1760
14.2. Proper Shipping Name			
Corrosive liquids, n.o.s. (4-nonylphenol, branched, Polyoxypropylenediamine)	CORROSIVE LIQUID, N.O.S. (4-nonylphenol, branched, Polyoxypropylenediamine)	CORROSIVE LIQUID, N.O.S. (4-nonylphenol, branched, Polyoxypropylenediamine)	Corrosive liquid, n.o.s. (4-nonylphenol, branched, Polyoxypropylenediamine)

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT	TDG	IMDG	IATA
14.3. Transport hazard class(es)			
8	8	8	8
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available			

14.6. Special precautions for user

DOT

UN-No.(DOT)	: UN1760
DOT Special Provisions (49 CFR 172.102)	: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"

TDG

UN-No. (TDG)	: UN1760
--------------	----------

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS.
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 5 L
Emergency Response Guide (ERG) Number	: 154

IMDG

Special provision (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW2
Properties and observations (IMDG)	: Causes burns to skin, eyes and mucous membranes.

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provision (IATA)	: A3, A803
ERG code (IATA)	: 8L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Phenol, 4-nonyl-, branched	CAS-No. 84852-15-3	≥ 30%
Phenol, 2-nonyl-, branched	CAS-No. 91672-41-2	1 – 5%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Phenol, 4-nonyl-, branched	CAS-No. 84852-15-3	≥ 30%
----------------------------	--------------------	-------

15.2. International regulations

CANADA

Polyoxypropylenediamine (9046-10-0)

Listed on the Canadian DSL (Domestic Substances List)

Phenol, 4-nonyl-, branched (84852-15-3)

Listed on the Canadian DSL (Domestic Substances List)

Phenol, 2-nonyl-, branched (91672-41-2)

Listed on the Canadian NDSL (Non-Domestic Substances List)

Diethylenetriamine (111-40-0)

Listed on the Canadian DSL (Domestic Substances List)

Cyclic Ethyleneamine (140-31-8)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Polyoxypropylenediamine (9046-10-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Phenol, 4-nonyl-, branched (84852-15-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Diethylenetriamine (111-40-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

20-3001CCL

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Cyclic Ethyleneamine (140-31-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Diethylenetriamine(111-40-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Cyclic Ethyleneamine(140-31-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases

H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H330	Fatal if inhaled
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.