

## Safety Data Sheet

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

Issue date: 09/10/2021 Version: 1.0

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture
Product name : EP1200LV B

#### 1.2. Recommended use and restrictions on use

Recommended use : Epoxy hardener

Restrictions on use : Product for industrial use only

#### 1.3. Supplier

ResinLab, LLC

N109 W13300 Ellsworth Drive

Germantown, WI 53022 - United States

T 1-877-259-1669

msds@resinlab.com - www.resinlab.com

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC:1-800-424-9300 (USA); +1 703-527-3887 (International)

#### **SECTION 2: Hazard(s) identification**

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Skin corrosion/irritation Category 1B H314 Causes severe skin burns and 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

Specific target organ toxicity (repeated exposure) Category 2 H373 May cause damage to organs through prolonged or repeated exposure

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) : H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H361 - Suspected of damaging fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

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.

P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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. P314 - Get medical advice/attention if you feel unwell.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage.

09/10/2021 EN (English US) Page 1

## Safety Data Sheet

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

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

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
aluminum oxide	(CAS-No.) 1344-28-1	50 – 75	Aquatic Acute 1, H400
4-Nonylphenol, branched	(CAS-No.) 84852-15-3	10 – 30	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Poly(oxypropylene)diamine	(CAS-No.) 9046-10-0	5 – 10	Skin Corr. 1, H314 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
N-(2-Aminoethyl)piperazine	(CAS-No.) 140-31-8	1 – 5	Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Repr. 2, H361 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
1,4-Bis(aminocyclohexyl)methane	(CAS-No.) 1761-71-3	1 – 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 Skin Sens. 1B, H317 STOT RE 2, H373 Aquatic Acute 2, H401

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

: First aid personnel should wear appropriate protective equipment during any rescue. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Maintain irrigation until patient received medical care. Continue to irrigate for one hour if medical attention is not available. Cover would with sterile dressing. Get medical

advice/attention. Wash clothing before reuse.

First-aid measures after eye contact

: Immediately rinse with plenty of water (for at least 15 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. Maintain irrigation until patient received medical care. Continue to irrigate for one hour if medical attention is not available. Cover would with sterile

dressing. Obtain medical attention.

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 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.

Unsuitable extinguishing media : Do not use water jet to extinguish.

09/10/2021 EN (English US) 2/11

## Safety Data Sheet

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

#### Specific hazards arising from the chemical

Hazardous decomposition products in case of

: Toxic fumes may be released

#### 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**

#### Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

#### 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".

#### **Environmental precautions**

Avoid release to the environment

#### 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

Other information

: Dispose of materials or solid residues at an authorized site.

#### Reference to other sections

For further information refer to section 13.

#### **SECTION 7: Handling and storage**

#### Precautions for safe handling

Additional hazards when processed

: Contains a component(s) that is encapsulated within the product and not expected to be released during normal processing conditions or a foreseeable emergency. Do not breathe dust created by sanding, grinding or machining.

Precautions for safe handling

Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace. 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. Avoid contact with skin and eyes.

Hygiene measures

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.

#### Conditions for safe storage, including any incompatibilities

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

#### **SECTION 8: Exposure controls/personal protection**

#### **Control parameters**

4-Nonylphenol, branched (84852-15-3)				
Not applicable	Not applicable			
Poly(oxypropylene)o	Poly(oxypropylene)diamine (9046-10-0)			
Not applicable	Not applicable			
N-(2-Aminoethyl)pip	N-(2-Aminoethyl)piperazine (140-31-8)			
Not applicable				
1,4-Bis(aminocyclohexyl)methane (1761-71-3)				
Not applicable				
aluminum oxide (1344-28-1)				
ACGIH	ACGIH OEL TWA	1 mg/m³ (Respirable fraction)		

09/10/2021 EN (English US) 3/11

## Safety Data Sheet

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

aluminum oxide (1344-28-1)		
OSHA	OSHA PEL (TWA) [1]	15 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the

workplace.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses with side shields

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 : off white

Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of

overexposure.

Mixture contains one or more component(s) which have the following odour:

Ammonia-like Odorless Phenol-like Amine-like Alcohol-like

Odor threshold : No data available pH : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available No data available

Flash point : > 93 °C

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 Density 1.66 g/cm<sup>3</sup> 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, dynamic : No data available

09/10/2021 EN (English US) 4/11

## Safety Data Sheet

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

Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available
VOC content : No data 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

Acids. Oxidizing agent. Chlorine trifluoride. Ethylene oxide. Metals. Reducing agents. Acid anhydrides. Acid chlorides.

#### 10.6. Hazardous decomposition products

Nitrogen oxides. Carbon oxides (CO, CO2). ammonia.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

4-Nonylphenol, branched (84852-15	5-3)
LD50 oral rat	1412 mg/kg body weight (Other, Rat, Male / female, Experimental value, Oral)
ATE US (oral)	1412 mg/kg body weight
Poly(oxypropylene)diamine (9046-1	0-0)
LD50 oral rat	2627 mg/kg
LD50 dermal rat	2980 mg/kg
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
ATE US (oral)	2627 mg/kg body weight
ATE US (dermal)	2980 mg/kg body weight
N-(2-Aminoethyl)piperazine (140-31	-8)
LD50 oral rat	2097 mg/kg body weight (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	866 mg/kg bw/day (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
ATE US (oral)	2097 mg/kg body weight
ATE US (dermal)	866 mg/kg body weight
1,4-Bis(aminocyclohexyl)methane (	1761-71-3)
LD50 oral rat	380 mg/kg (EPA OPP 81-1: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	2110 mg/kg body weight (EPA OPP 81-2, 24 h, Rabbit, Male / female, Experimental value, Dermal)
ATE US (oral)	380 mg/kg body weight
ATE US (dermal)	2110 mg/kg body weight
aluminum oxide (1344-28-1)	
LD50 oral rat	> 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LC50 Inhalation - Rat	7.6 mg/l air (Equivalent or similar to OECD 403, 1 h, Rat, Male, Experimental value, Inhalation (aerosol))
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Assumed to cause serious eye damage

09/10/2021 EN (English US) 5/11

## Safety Data Sheet

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

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.

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

4-Nonylphenol, 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)

1,4-Bis(aminocyclohexyl)methane (1761-71-3)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
aluminum oxide (1344-28-1)	
NOAEC (inhalation,rat,dust/mist/fume,90 days)	0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90- Day Study)
Aspiration hazard	Not classified

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. Toxic to aquatic life with long lasting effects.

4-Nonylphenol, branched (84852-15-3)		
LC50 - Fish [1]	0.08 mg/l (ASTM E729-96, 96 h, Hybopsis monacha, Static system, Fresh water, Experimental value, Nominal concentration)	
EC50 - Crustacea [1]	0.084 mg/l (ASTM E729-88, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value)	
NOEC chronic fish	0.006 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '91 d'	
Poly(oxypropylene)diamine (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)	
N-(2-Aminoethyl)piperazine (140-31-8)		
LC50 - Fish [1]	2190 mg/l (96 h, Pimephales promelas, Static system, Fresh water, Experimental value)	
EC50 - Crustacea [1]	58 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, GLP)	
ErC50 algae	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Fresh water, Experimental value, GLP)	
1,4-Bis(aminocyclohexyl)methane (1761-71-	3)	
LC50 - Fish [1]	68 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value Nominal concentration)	
EC50 - Crustacea [1]	6.84 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	
LC50 - Fish [2]	68 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [2]	6.84 mg/l Test organisms (species): Daphnia magna	

09/10/2021 EN (English US) 6/11

# Safety Data Sheet

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

1,4-Bis(aminocyclohexyl)methane (1761-71-3)		
ErC50 algae	140 – 200 mg/l (DIN 38412-9, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)	
LOEC (chronic)	7.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	> 1 mg/l Test organisms (species): other:freshwater fish	
aluminum oxide (1344-28-1)		
LC50 - Fish [1]	1.16 mg/l (EPA 600/4-85/013: Method for measuring the acute toxicity of effluents to freshwater and marine organisms, 96 h, Pimephales promelas, Semi-static system, Fresh water, Weight of evidence, Aluminium)	
ErC50 algae	1050 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Weight of evidence)	

## 12.2. Persistence and degradability

4-Nonylphenol, branched (84852-15-3)			
Persistence and degradability	Biodegradability in soil: no data available. Readily biodegradable in water.		
Poly(oxypropylene)diamine (9046-10-0)			
Persistence and degradability	Not readily biodegradable in water.		
N-(2-Aminoethyl)piperazine (140-31-8)			
Persistence and degradability	Not readily biodegradable in water.		
Chemical oxygen demand (COD)	0.56 g O₂/g substance		
1,4-Bis(aminocyclohexyl)methane (1761-71-3)			
Persistence and degradability	Not readily biodegradable in water.		
aluminum oxide (1344-28-1)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
BOD (% of ThOD)	Not applicable		

## 12.3. Bioaccumulative potential

4-Nonylphenol, branched (84852-15-3)		
BCF - Fish [1]	1200 – 1300 (OECD 305: Bioconcentration: Flow-Through Fish Test, 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).	
Poly(oxypropylene)diamine (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	Not bioaccumulative.	
N-(2-Aminoethyl)piperazine (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	Not bioaccumulative.	
1,4-Bis(aminocyclohexyl)methane (1761-71-3)		
BCF - Fish [1]	< 60 (OECD 305: Bioconcentration: Flow-Through Fish Test, 60 day(s), Cyprinus carpio, Flow-through system, Fresh water, Read-across, GLP)	
Partition coefficient n-octanol/water (Log Pow)	2.03 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
aluminum oxide (1344-28-1)		
Bioaccumulative potential	No bioaccumulation data available.	

09/10/2021 EN (English US) 7/11

## Safety Data Sheet

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

### 12.4. Mobility in soil

4-Nonylphenol, branched (84852-15-3)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.35 – 5.69 (log Koc, Other, Experimental value, GLP)	
Ecology - soil	Adsorbs into the soil.	
Poly(oxypropylene)diamine (9046-10-0)		
Surface tension	Data waiving	
Ecology - soil	No (test)data on mobility of the substance available.	
N-(2-Aminoethyl)piperazine (140-31-8)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.57 (log Koc, Read-across, GLP)	
Ecology - soil	Low potential for mobility in soil.	
1,4-Bis(aminocyclohexyl)methane (1761-71-3)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.25 (log Koc, Other, Calculated value)	
Ecology - soil	Low potential for mobility in soil.	
aluminum oxide (1344-28-1)		
Ecology - soil	No (test)data on mobility of the substance available.	

#### 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**

#### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description (DOT) : UN3267 Corrosive liquid, basic, organic, n.o.s. (4-Nonylphenol, branched;

Poly(oxypropylene)diamine), 8, III

UN-No.(DOT) : UN3267

Proper Shipping Name (DOT) : Corrosive liquid, basic, organic, n.o.s.

4-Nonylphenol, branched; Poly(oxypropylene)diamine

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : III - Minor Danger Hazard labels (DOT) : 8 - Corrosive



Dangerous for the environment : Yes

Marine pollutant : Yes



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) : 241

09/10/2021 EN (English US) 8/11

## Safety Data Sheet

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

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 Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

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",52 - Stow "separated from" acids

Emergency Response Guide (ERG) Number : 153

Other information : No supplementary information available.

#### **Transportation of Dangerous Goods**

Not applicable

Class (IMDG)

#### Transport by sea

Transport document description (IMDG) : UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (4-Nonylphenol, branched;

Poly(oxypropylene)diamine), 8, III

UN-No. (IMDG) : 3267

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

Poly(oxypropylene)diamine; 4-Nonylphenol, branched; 4-Nonylphenol, branched;

Poly(oxypropylene)diamine : 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

Limited quantities (IMDG) : 5 L

Marine pollutant : Yes



#### Air transport

Transport document description (IATA) : UN 3267 Corrosive liquid, basic, organic, n.o.s. (4-Nonylphenol, branched;

Poly(oxypropylene)diamine), 8, III

UN-No. (IATA) : 326

Proper Shipping Name (IATA) : Corrosive liquid, basic, organic, n.o.s.

 $\hbox{4-Nonylphenol, branched ; Poly(oxypropylene)} diamine$ 

Class (IATA) : 8 - Corrosives
Packing group (IATA) : III - Minor Danger

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

09/10/2021 EN (English US) 9/11

## Safety Data Sheet

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

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.

4-Nonylphenol, branched	CAS-No. 84852-15-3	10 – 30%
aluminum oxide	CAS-No. 1344-28-1	50 – 75%

4-Nony	vlpheno	l, branched	(84852-15-3)
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Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

EPA TSCA Regulatory Flag SP - SP - indicates a substance that is identified in a proposed Significant New Use Rule.

### Poly(oxypropylene)diamine (9046-10-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

### N-(2-Aminoethyl)piperazine (140-31-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 1,4-Bis(aminocyclohexyl)methane (1761-71-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### aluminum oxide (1344-28-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

#### 15.2. International regulations

#### **CANADA**

#### 4-Nonylphenol, branched (84852-15-3)

Listed on the Canadian DSL (Domestic Substances List)

#### Poly(oxypropylene)diamine (9046-10-0)

Listed on the Canadian DSL (Domestic Substances List)

#### N-(2-Aminoethyl)piperazine (140-31-8)

Listed on the Canadian DSL (Domestic Substances List)

## 1,4-Bis(aminocyclohexyl)methane (1761-71-3)

Listed on the Canadian DSL (Domestic Substances List)

#### aluminum oxide (1344-28-1)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

Contains the following REACH ingredient(s): 4-Nonylphenol, branched (EC 284-325-5, CAS 84852-15-3)

#### **National regulations**

No additional information available

#### 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
N-(2-Aminoethyl)piperazine(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
aluminum oxide(1344-28-1)	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

09/10/2021 EN (English US) 10/11

## Safety Data Sheet

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

## Full text of H-phrases:

H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

### SDS US - ResinLab

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.

09/10/2021 EN (English US) 11/11