1000AM-B

Safety Data Sheet

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

Date of issue: 11/05/2018 Supersedes: 02/22/2016

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : 1000AM-B

Product code : 1000AM-B

Other means of identification : 1000AM-B/1 1000AM-B/5,1000AM-B/55

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Protective Industrial Polymers
7875 Bliss Parkway
North Ridgeville, Ohio 44039 - USA-Ohio
T 440-327-0015
www.protectpoly.com

1.4. Emergency telephone number

Emergency number : Chemtrec: 800-424-9300 (Outside USA) 703-527-3887

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 1A	H314	Causes severe skin burns and eye damage
Skin sensitization Category 1	H317	May cause an allergic skin reaction

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

Precautionary statements (GHS-US) :
P260 - Do not breathe vapors
P261 - Avoid breathing vapors
P264 - Wash hands 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
P280 - Wear protective clothing
P301+P312 - If swallowed: Call a 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 soap
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
P310 - Immediately call a doctor
P321 - Specific treatment (see a doctor if symptoms do not go away. on this label)
P330 - Rinse mouth
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse

P405 - Store locked up
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None under normal conditions.

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
O,O'-Bis(2-aminopropyl)polypropyleneglycol	(CAS No) 9046-10-0	30 - 55	Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
4-(2,4-dimethylheptan-3-yl)phenol	(CAS No) 25154-52-3	20 - 40	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Phenol,4-nonyl-,branched	(CAS No) 84852-15-3	20 - 30	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1-Piperazine ethanamine	(CAS No) 140-31-8	5 - 20	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1A, H314
4-tert-butylphenol	(CAS No) 98-54-4	5 - 15	Skin Irrit. 2, H315 Eye Dam. 1, H318
Benzenemethanol	(CAS No) 100-51-6	0 - 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319 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 : If you feel unwell, seek medical advice (show the label where possible). If you feel unwell, seek medical advice.

First-aid measures after inhalation : Remove the victim into fresh air.

First-aid measures after skin contact : When symptoms occur: rinse immediately with plenty of water.

First-aid measures after eye contact : Rinse immediately with plenty of water.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

Symptoms/injuries : Irritation of the respiratory tract.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye damage. Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

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 : Alcohol resistant foam, water, water fog, CO_2, dry chemical, dry sand, limestone powder.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Eliminate all ignition sources if safe to do so. Evacuate area. In case of fire: Stop leak if safe to do so.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

No special environmental precuations required.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb spillage to prevent material damage. Ventilate the contaminated area. Eliminate ignition sources including sources of electrical, static or frictional sparks. Collect the material using absorbent, non-sparking tools.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Use personal protective equipment as required.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep only in original container. Keep container closed when not in use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1-Piperazine ethanamine (140-31-8)
Not applicable

O,O'-Bis(2-aminopropyl)polypropyleneglycol (9046-10-0)
Not applicable

4-(2,4-dimethylheptan-3-yl)phenol (25154-52-3)
Not applicable

4-tert-butylphenol (98-54-4)
Not applicable

Phenol,4-nonyl-,branched (84852-15-3)
Not applicable

Benzenemethanol (100-51-6)
Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (E.

Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product

Eye protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	clear
Odor	:	Ammonical
Odor threshold	:	No data available
pH	:	Alkaline
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 392 °F
Flash point	:	> 124 °C
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	No data available
Specific gravity / density	:	1.03 g/m³
Solubility	:	No data available
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

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids, strong bases and oxidation agents.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

1000AM-B	
ATE US (oral)	500 mg/kg body weight

1-Piperazine ethanamine (140-31-8)	
LD50 oral rat	2097 mg/kg body weight (Rat, Male, Experimental value)
LD50 dermal rabbit	866 mg/kg bw/day (Rabbit, Male, Experimental value)
ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight

4-(2,4-dimethylheptan-3-yl)phenol (25154-52-3)	
ATE US (oral)	500 mg/kg body weight

4-tert-butylphenol (98-54-4)	
LD50 oral rat	> 2000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LC50 inhalation rat (mg/l)	> 5.6 mg/l/4h (Rat; Experimental value)
ATE US (oral)	3370 mg/kg body weight
ATE US (dermal)	2621 mg/kg body weight

Phenol,4-nonyl-,branched (84852-15-3)	
LD50 oral rat	1412 mg/kg body weight (Other, Rat, Male/female, Experimental value)
ATE US (oral)	1412 mg/kg body weight

Benzenemethanol (100-51-6)	
LD50 oral rat	1620 mg/kg (Rat; Experimental value)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Inconclusive, insufficient data)
LC50 inhalation rat (mg/l)	> 4.178 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Experimental value)
ATE US (oral)	1620 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: Alkaline

Serious eye damage/irritation : Not classified
pH: Alkaline

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure : Not classified

Aspiration hazard : Not classified

Symptoms/injuries : Irritation of the respiratory tract.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye damage. Causes serious eye irritation.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not classified due to lack of data.

1-Piperazine ethanamine (140-31-8)	
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value)
EC50 Daphnia 1	58 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value)

4-tert-butylphenol (98-54-4)	
EC50 Daphnia 1	3.9 mg/l (EC50; 48 h)
LC50 fish 2	5.14 mg/l (LC50; 96 h)
Threshold limit algae 2	11.2 mg/l (EC50; 72 h)

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 Daphnia 1	0.084 mg/l (ASTM E729-88, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value)

Benzenemethanol (100-51-6)	
LC50 fish 1	460 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	230 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value)
ErC50 (algae)	770 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value)

12.2. Persistence and degradability

1000AM-B	
Persistence and degradability	Not established.

1-Piperazine ethanamine (140-31-8)	
Persistence and degradability	Not readily biodegradable in water.
Chemical oxygen demand (COD)	0.56 g O_2/g substance

4-tert-butylphenol (98-54-4)	
Persistence and degradability	Readily biodegradable in water. Low potential for mobility in soil. Photolysis in the air.
ThOD	2.77 g O_2/g substance

Phenol,4-nonyl-,branched (84852-15-3)	
Persistence and degradability	Biodegradability in soil: no data available. Readily biodegradable in water.

Benzenemethanol (100-51-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.6 g O_2/g substance
Chemical oxygen demand (COD)	2.4 g O_2/g substance
ThOD	2.5 g O_2/g substance

12.3. Bioaccumulative potential

1000AM-B	
Bioaccumulative potential	Not established.

1-Piperazine ethanamine (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)
Log Pow	-1.48 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

4-tert-butylphenol (98-54-4)	
BCF fish 1	120 (BCF; 3 h)
BCF fish 2	20 - 88 (BCF)
BCF other aquatic organisms 1	34 (BCF; 24 h; Chlorella sp.)
BCF other aquatic organisms 2	240 (BCF; 5 h; Bacteria)
Log Pow	3 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Phenol,4-nonyl-,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)
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).

Benzenemethanol (100-51-6)	
Log Pow	1 - 1.1 (Experimental value, Other, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

1000AM-B	
Ecology - soil	No Data Available.

1-Piperazine ethanamine (140-31-8)	
Log Koc	4.57 (log Koc, Read-across, GLP)
Ecology - soil	Low potential for mobility in soil.

4-tert-butylphenol (98-54-4)	
Log Koc	log Koc,3.1; QSAR

Phenol,4-nonyl-,branched (84852-15-3)	
Log Koc	4.35 - 5.69 (log Koc, Other, Experimental value, GLP)
Ecology - soil	Adsorbs into the soil.

Benzenemethanol (100-51-6)	
Surface tension	39 mN/m (20 °C)
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 : Contain and dispose of waste according to local regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2735 Amines, liquid, corrosive, n.o.s. (Polyetheramine, nonyl phenol), 8, III
UN-No.(DOT) : UN2735
Proper Shipping Name (DOT) : Amines, liquid, corrosive, n.o.s.
Polyetheramine, nonyl phenol
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT) : III - Minor Danger

Hazard labels (DOT)	:	8 - Corrosive

DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	241
DOT Symbols	:	G - Identifies PSN requiring a technical name
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 (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	:	52 - Stow ‘‘separated from’’ acids
Emergency Response Guide (ERG) Number	:	153
Other information	:	No supplementary information available.

TDG

Transport by sea

Air transport

Transport document description (IATA)	:	UN 2735 Amines, liquid, corrosive, n.o.s., 8, III
UN-No. (IATA)	:	2735
Proper Shipping Name (IATA)	:	Amines, liquid, corrosive, n.o.s.
Class (IATA)	:	8 - Corrosives
Packing group (IATA)	:	III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

1000AM-B

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

1-Piperazine ethanamine (140-31-8)

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

O,O'-Bis(2-aminopropyl)polypropyleneglycol (9046-10-0)

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

4-(2,4-dimethylheptan-3-yl)phenol (25154-52-3)

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

4-tert-butylphenol (98-54-4)

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

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

Benzenemethanol (100-51-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

Phenol,4-nonyl-,branched (84852-15-3)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

1-Piperazine ethanamine (140-31-8)
U.S. - New Jersey - Right to Know Hazardous Substance List

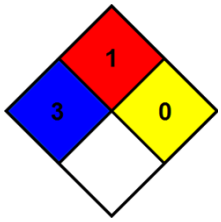
SECTION 16: Other information

Other information : Disclaimer: This SDS to the best of our knowledge conforms to the requirements of OSHA 20 CFR 1910.1200 and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace.

Full text of H-phrases:

H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
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
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard	:	3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
NFPA fire hazard	:	1 - Must be preheated before ignition can occur.
NFPA reactivity	:	0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health	:	3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability	:	1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)
Physical	:	0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)

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