



## Safety Data Sheet

### AMERICAN BILTRITE AD-535 PART B

Safety Data Sheet dated: 3/27/2017 - version 1

Date of first edition: 3/27/2017

## 1. Identification

### Product identifier

Mixture identification:

Trade name: AMERICAN BILTRITE AD-535 PART B

### Recommended use and restrictions on use

Recommended use: Hardener for epoxy products

Restrictions on use: N.A.

### Supplier's details

Company: American Biltrite

200 Bank Street

J1H 4K3 - Sherbrooke - Quebec - CAN

Phone: 1-800-479-0190

### Emergency phone number

(USA) CHEMTREC 1-800-255-3924

(Canada) CANUTEC 1-613-996-6666

## 2. Hazard identification



### Classification of the product

Acute Tox. 4	Harmful if inhaled.
Skin Corr. 1A	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1A	May cause an allergic skin reaction.
Muta. 2	Suspected of causing genetic defects if inhaled.
Repr. 1B	May damage fertility or the unborn child if inhaled.
STOT SE 2	May cause damage to organs if inhaled.
Aquatic Acute 3	Harmful to aquatic life.
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.

### Label elements

#### Pictograms and Signal Words



Danger

#### Hazard statements:

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H341.A	Suspected of causing genetic defects if inhaled.
H360.A	May damage fertility or the unborn child if inhaled.
H371.A	May cause damage to organs if inhaled.
H402	Harmful to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

#### Precautionary statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.

P260.1	Do not breathe mist/vapours/spray.
P264.2	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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+P311.A	IF exposed or concerned: Call a POISON CENTER.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310.A	Immediately call a POISON CENTER.
P321.A	Specific treatment (see supplementary instructions on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P405	Store locked up.
P501.A	Dispose of contents/container in accordance with applicable regulations.

**Other hazards**

None

**Ingredient(s) with unknown acute toxicity**

None

**3. Composition/information on ingredients**

**Substances**

N.A.

**Mixtures**

Hazardous components within the meaning of WHMIS 2015 and related classification:

**List of components**

Quantity	Name	Ident. Numb.	Classification
25-50 %	Amides, from methyl epoxyhydroxyoctadecanoate, tetraethylenepentamine and vegetable-oil fatty acids	CAS:68443-08-3	Skin Corr. 1A, H314; Eye Dam. 1, H318; STOT SE 3, H335
10-25 %	2,4,6-Tri(dimethylaminomethyl)phenol	CAS:90-72-2	Skin Corr. 1B, H314; Skin Sens. 1A, H317; Aquatic Chronic 3, H412
10-25 %	Diisopropyl-naphthalene	CAS:38640-62-9	Asp. Tox. 1, H304; Aquatic Chronic 1, H410
5-10 %	Aminoethylpiperazine	CAS:140-31-8	Acute Tox. 3, H311; Eye Dam. 1, H318; Skin Corr. 1B, H314; Skin Sens. 1, H317; Repr. 1B, H360
5-10 %	Bisphenol A	CAS:80-05-7	Eye Dam. 1, H318; STOT SE 3, H335; Repr. 2, H361; Skin Sens. 1, H317
2.5-5 %	Diethylene triamine	CAS:111-40-0	Acute Tox. 4, H312; Eye Dam. 1, H318; Repr. 2, H361; STOT SE 3, H335; Aquatic Chronic 3, H412; Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1B, H317; Acute Tox. 2, H330
2.5-5 %	Bis[(dimethylamino)methyl]phenol	CAS:71074-89-0	Skin Corr. 1B, H314
1-2.5 %	4-Nonylphenol, branched	CAS:84852-15-3 EC:284-325-5 Index:601-053-00-8	Repr. 2, H361; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Eye Dam. 1, H318; Muta. 2, H341; STOT SE 2, H371; Skin Corr. 1B, H314
1-2.5 %	Benzyl-dimethylamine	CAS:103-83-3	Flam. Liq. 3, H226; Skin Corr. 1B, H314; Aquatic Chronic 3, H412; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332

**4. First-aid measures**

**Description of necessary first-aid measures**

In case of skin contact:

- Immediately take off all contaminated clothing.
- OBTAIN IMMEDIATE MEDICAL ATTENTION.
- Remove contaminated clothing immediately and dispose of safely.
- After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

**Most important symptoms/effects, acute and delayed**

Eye irritation

Eye damages

Skin Irritation

Erythema

**Indication of immediate medical attention and special treatment needed, if necessary**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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**5. Fire-fighting measures**

**Suitable and unsuitable extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO<sub>2</sub>).

Unsuitable extinguishing media:

None in particular.

**Specific hazards arising from the hazardous product**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

**Special protective equipment and precautions for fire-fighters**

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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**6. Accidental release measures**

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

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

**Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

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**7. Handling and storage**

**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Do not use on extensive surface areas in premises where there are occupants.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

## 8. Exposure controls/personal protection

### Control parameters

#### List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m <sup>3</sup>	Long Term ppm	Short Term mg/m <sup>3</sup>	Short Term ppm	Behaviour	Note
Bisphenol A	EU			10				Indicative	
Diethylene triamine	ACGIH				1				Skin - potential significant contribution to overall exposure by the cutaneous route; eye and upper respiratory tract irritation;

### Appropriate engineering controls

N.A.

### Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: amber

Odour: like: Amines

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: >100 °C (212 °F)

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 9.80 g/cm<sup>3</sup>

Solubility in water: Insoluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

### Other information

Substance groups relevant properties: N.A.

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

## 10. Stability and reactivity

### Reactivity

Stable under normal conditions

### Chemical stability

Data not Available.

### Possibility of hazardous reactions

None.

### Conditions to avoid

Stable under normal conditions.

**Incompatible materials**

None in particular.

**Hazardous decomposition products**

None.

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**11. Toxicological information**

**Information on toxicological effects**

**Toxicological information of the mixture:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

**Toxicological information on main components of the mixture:**

2,4,6-Tri(dimethylaminomethyl) phenol	a) acute toxicity	LD50 Skin Rat = 1280 mg/kg  LD50 Oral Rat = 1000 mg/kg
DiisopropylNaphthalene	a) acute toxicity	LD50 Skin Rat > 4500 mg/kg LC50 Inhalation Rat > 5,64000 mg/l 4h LD50 Oral Rat = 3900 mg/kg
Aminoethylpiperazine	a) acute toxicity	LD50 Skin Rabbit = 880 µL/kg LD50 Oral Rat = 2140 mg/kg LD50 Oral Rat = 2140 µL/kg
Bisphenol A	a) acute toxicity	LD50 Skin Rabbit = 3000,00000 mg/kg LD50 Oral Rat = 3200 mg/kg LD50 Skin Rabbit = 3 ml/kg LC50 Inhalation Rat > 17 mg/l 6h
Diethylene triamine	a) acute toxicity	LD50 Skin Rabbit = 672 mg/kg LD50 Oral Rat = 819 mg/kg
4-Nonylphenol, branched	a) acute toxicity	LD50 Oral Rat 1300 mg/kg LD50 Skin Rabbit > 2000 mg/kg

**If not differently specified, the information required in the regulation and listed below must be considered as N.A.**

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

**Substance(s) listed on the IARC Monographs:**

None

**Substance(s) listed as OSHA Carcinogen(s):**

None

**Substance(s) listed as NIOSH Carcinogen(s):**

None

**Substance(s) listed on the NTP report on Carcinogens:**

None

## 12. Ecological information

### Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

#### List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
10-25 %	Diisopropylnaphthalene	CAS: 38640-62-9	a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 1000 mg/L 96h a) Aquatic acute toxicity : LC50 Fish Oryzias latipes > 1000 mg/L 96h
5-10 %	Aminoethylpiperazine	CAS: 140-31-8	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 1950 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata > 1000 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss >= 100 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 32 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 495 mg/L 72h IUCLID
5-10 %	Bisphenol A	CAS: 80-05-7	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 3,60000 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 4 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 9,90000 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 10,20000 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 2,50000 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia Magna = 3,90000 mg/L 48h
2.5-5 %	Diethylene triamine	CAS: 111-40-0	a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 248 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 16 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 1164 mg/L 72h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 345,60000 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 592 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Leuciscus idus = 430,00000 mg/L 96h a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 37,00000 mg/L 24h a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 16,00000 mg/L 48h
1-2.5 %	4-Nonylphenol, branched	CAS: 84852-15-3 - EINECS: 284-325-5 - 67-548-EC: 601-053-00-8	LC50 Fish Pimephales promelas 0,135 mg/L 96h „Holcombe, G.W., Phipps, G.L., Knuth, M.L. and Felhaber, T. (1984) Environ. Pollut. (Series A) 35, 367-381  LC100 Fish Leuciscus idus 1,1 mg/L 48h „Huels study, 1988 (unpublished) LC50 Fish Leuciscus idus 0,95 mg/L 48h „Huels study, 1988 (unpublished)  LOEC Fish Pimephales promelas 14 µg/L 33d „Chemical Manufacturers Association (1991) Two environmental effects 4-Nonylphenol final reports 1. Chronic toxicity of Nonylphenol to the Mysid, Mysidopsis bahia: EnviroSystems Study Number 8977-CMA 2. Early life stage toxicity of Nonylphenol to the fath NOEC Fish Pimephales promelas 7,4 µg/L 33d „Chemical Manufacturers Association (1991) Two environmental effects 4-Nonylphenol final reports 1. Chronic toxicity of Nonylphenol to the Mysid, Mysidopsis bahia: EnviroSystems Study Number 8977-CMA 2. Early life stage toxicity of Nonylphenol to the fath EC100 Daphnia Daphnia magna > 400 µg/L 48h „Huels report No. DK-522, 1992 (unpublished) EC0 Daphnia Daphnia magna < 100 µg/L 48h „Huels report No. DK-522, 1992 (unpublished) EC50 Daphnia Daphnia magna 140 µg/L 48h „Huels report No. DK-522, 1992 (unpublished) LOEC Daphnia Daphnia magna > 100 µg/L 21d „Huels report No. DL-143, 1992 (unpublished) NOEC Daphnia Daphnia magna 0,024 mg/L 21d ICI PLC (1991) Nonyl Phenol: Chronic Toxicity to Daphnia Magna Report No: BLS1319/B (Interim) BL4176/B (Final) EC90 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 3,2 mg/L 72h Huels study (unpublished) EC10 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 0,5 mg/L 72h Huels study (unpublished) EC50 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 1,3 mg/L 72h Huels study (unpublished) a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 135 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1351 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 14 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 36 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 16 mg/L 72h EPA a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 13 mg/L 72h IUCLID
1-2.5 %	Benzylidimethylamine	CAS: 103-83-3	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 358 mg/L 96h EPA

### Persistence and degradability

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

N.A.

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**13. Disposal considerations****Safe handling and methods for disposal**

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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**14. Transport information****UN number**

TDG-UN number: UN1760

ADR-UN number: 1760

DOT-UN Number: UN1760

IATA-Un number: 1760

IMDG-Un number: 1760

**UN proper shipping name**

TDG-Shipping Name: CORROSIVE LIQUID, N.O.S. (Amides, from methyl epoxyhydroxyoctadecanoate, tetraethylenepentamine and vegetable-oil fatty acids - 2,4,6-Tri(dimethylaminomethyl)phenol)

ADR-Shipping Name: CORROSIVE LIQUID, N.O.S. (Amides, from methyl epoxyhydroxyoctadecanoate, tetraethylenepentamine and vegetable-oil fatty acids - 2,4,6-Tri(dimethylaminomethyl)phenol)

DOT-Proper Shipping Name: Corrosive liquids, n.o.s. (Amides, from methyl epoxyhydroxyoctadecanoate, tetraethylenepentamine and vegetable-oil fatty acids - 2,4,6-Tri(dimethylaminomethyl)phenol)

IATA-Technical name: CORROSIVE LIQUID, N.O.S. (Amides, from methyl epoxyhydroxyoctadecanoate, tetraethylenepentamine and vegetable-oil fatty acids - 2,4,6-Tri(dimethylaminomethyl)phenol)

IMDG-Technical name: CORROSIVE LIQUID, N.O.S. (Amides, from methyl epoxyhydroxyoctadecanoate, tetraethylenepentamine and vegetable-oil fatty acids - 2,4,6-Tri(dimethylaminomethyl)phenol)

**Transport hazard class(es)**

TDG-Class: 8

ADR-Class: 8

DOT-Hazard Class: 8

IATA-Class: 8

IMDG-Class: 8

**Packing group**

TDG-Packing Group: III

ADR-Packing Group: III

DOT Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

**Environmental hazards**

Marine pollutant: Yes

Environmental Pollutant: N.A.

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)**

N.A.

**Special precautions in connection with transport or conveyance**

TDG:

TDG Special provisions: 16

Department of Transportation (DOT):

DOT-Special Provision(s): IB3, T7, TP1, TP28

DOT-Label(s): 8

DOT-Symbol: N/A

DOT-Cargo Aircraft: N/A

DOT-Passenger Aircraft: N/A

DOT-Bulk: N/A

DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: 8

ADR-Hazard identification number: 80

ADR-Transport category (Tunnel restriction code): 3 (E)

**Air (IATA):**

IATA-Passenger Aircraft: 852

IATA-Cargo Aircraft: 856

IATA-Label: 8

IATA-Subrisk: -

IATA-Erg: 8L

IATA-Special Provisions: A3 A803

**Sea (IMDG):**

IMDG-Stowage Code: Category A

IMDG-Stowage Note: Clear of living quarters.

IMDG-Subrisk: -

IMDG-Special Provisions: 223 274

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-A, S-B

IMDG-MFAG: N/A

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**15. Regulatory information**

**Canada - Federal regulations**

**DSL - Domestic Substances List**

**DSL Inventory:**

All the substances are listed in the DSL.

**NDSL - Non Domestic Substances List**

**NDSL Inventory:**

no substances listed

**NPRI - National Pollutant Release Inventory**

**Substances listed in NPRI:**

no substances listed

**USA - Federal regulations**

**TSCA - Toxic Substances Control Act**

**TSCA inventory:**

All the components are listed on the TSCA inventory

**TSCA listed substances:**

Amides, from methyl epoxyhydroxyoctadecanoate, tetraethylenepentamine and vegetable-oil fatty acids	is listed in TSCA	Section 8b
2,4,6-Tri(dimethylaminomethyl)phenol	is listed in TSCA	Section 8b
Diisopropylnaphthalene	is listed in TSCA	Section 8b
Aminoethylpiperazine	is listed in TSCA	Section 8b
Bisphenol A	is listed in TSCA	Section 8b
Diethylene triamine	is listed in TSCA	Section 8b
4-Nonylphenol, branched	is listed in TSCA	Section 8b, Section 8a - PAIR
Benzyl dimethylamine	is listed in TSCA	Section 8b

**SARA - Superfund Amendments and Reauthorization Act**

**Section 302 - Extremely Hazardous Substances:**

no substances listed

**Section 304 - Hazardous substances:**

no substances listed

**Section 313 - Toxic chemical list:**

Bisphenol A

**CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**

**Substance(s) listed under CERCLA:**

no substances listed

**CAA - Clean Air Act**

**CAA listed substances:**



**CWA - Clean Water Act****CWA listed substances:**

no substances listed

**USA - State specific regulations****California Proposition 65****Substance(s) listed under California Proposition 65:**

Bisphenol A Listed as reproductive toxicant

**Massachusetts Right to know****Substance(s) listed under Massachusetts Right to know:**

Aminoethylpiperazine

Bisphenol A

Diethylene triamine

**Pennsylvania Right to know****Substance(s) listed under Pennsylvania Right to know:**

Aminoethylpiperazine

Bisphenol A

Diethylene triamine

**New Jersey Right to know****Substance(s) listed under New Jersey Right to know:**

Aminoethylpiperazine

Bisphenol A

Diethylene triamine

Benzyldimethylamine

**16. Other information**

Code	Description
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects .
H341.A	Suspected of causing genetic defects if inhaled.
H360	May damage fertility or the unborn child <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H360.A	May damage fertility or the unborn child if inhaled.
H361	Suspected of damaging fertility or the unborn child <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H371	May cause damage to organs <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H371.A	May cause damage to organs if inhaled.
H400	Very 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.

Safety Data Sheet dated: 3/27/2017 - version 1

Product code: 2921

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability

for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.