

Issue Date 30-Jun-2015

Revision Date 01-Mar-2018

Version 1

1. IDENTIFICATION

Product identifier

Product Name Tuffbond 314A

Other means of identification

Product Code MS-314A

UN/ID no. UN 3082

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Epoxy Adhesive.

Uses advised against None known

Details of the supplier of the safety data sheet

Manufacturer Address

Hernon Manufacturing Inc.
121 Tech Drive
Sanford, FL 32771
800-527-0004

Emergency telephone number

Company Phone Number 407-322-4000

Emergency Telephone Chemtel 800-255-3924

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2 |
| Skin sensitization | Category 1 |

Label elements

Emergency Overview

Warning

Hazard statements

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction



Appearance No information available

Physical state Liquid

Odor Mild

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash before reuse
 If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|-------------------------|------------|----------|--------------|
| BISPHENOL A EPOXY RESIN | 25068-38-6 | 60 - 100 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| | |
|---------------------|--|
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse. |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. |
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell. |

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂). Extinguishing powder. Water spray (fog).

Unsuitable extinguishing media Water jet.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides (NO_x).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep at temperatures between 7 and 29 °C.

Incompatible materials Acids. Bases. Amines. Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical state | Liquid | Odor | Mild |
| Appearance | No information available | Odor threshold | No information available |
| Color | Clear | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------------------|---------------------------|--------------------------------|
| pH | Does not apply | |
| Melting point / freezing point | No information available | |
| Boiling point / boiling range | > 260 °C / 500 °F | |
| Flash point | > 252 °C / 486 °F | |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | 0.03 hPa @ 77 °C / 171 °F | |
| Vapor density | No information available | |
| Relative density | 1.17 | |
| Water solubility | Insoluble | |
| Solubility in other solvents | No information available | |
| Partition coefficient | No information available | |
| Autoignition temperature | No information available | |
| Decomposition temperature | No information available | |
| Kinematic viscosity | No information available | |
| Dynamic viscosity | No information available | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |

Other Information

| | |
|-------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Incompatible materials.

Incompatible materials

Acids. Bases. Amines. Oxidizing agents.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|---------------------|--------------------|
| Inhalation | No data available. |
| Eye contact | No data available. |
| Skin contact | No data available. |
| Ingestion | No data available. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------------------------------|-----------------------|-------------|-----------------|
| BISPHENOL A EPOXY RESIN 25068-38-6 | = 11400 mg/kg (Rat) | - | - |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|---------------------------------|---------------------------|
| Sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 11,400.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|-------------------------------|---|
| Disposal of wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated packaging | Do not reuse container. |

14. TRANSPORT INFORMATION

DOT

| | |
|-----------------------------|---|
| UN/ID no. | UN 3082 |
| Proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy Resin) |
| Hazard Class | 9 |
| Packing Group | III |
| Special Provisions | 8, 146, 173, 335, IB3, T4, TP1, TP29 |
| Marine pollutant | Yes |
| Description | Note: Not regulated for ground transport |

IATA

| | |
|-----------------------------|---|
| UN/ID no. | UN 3082 |
| Proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy Resin) |
| Hazard Class | 9 |
| Packing Group | III |
| Special Provisions | A97, A158, A197 |
| Description | Limited Quantities: 5L, 30 kg gross weight |

IMDG

| | |
|-----------------------------|---|
| UN/ID no. | UN 3082 |
| Proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy Resin) |
| Hazard Class | 9 |
| Packing Group | III |
| EmS-No. | F-A, S-F |
| Special Provisions | 274, 335, 969 |
| Marine pollutant | Yes |
| Description | Limited Quantities: 5L, 30 kg gross weight |

15. REGULATORY INFORMATION

International Inventories

| | |
|---------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

All ingredients are on the inventory or are exempt from listing.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|----|
| Acute health hazard | No |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | |
|--------------------|------------------|----------------|--------------------|------------------------------------|
| <u>NFPA</u> | Health hazards 2 | Flammability 1 | Instability 0 | Physical and Chemical Properties - |
| <u>HMIS</u> | Health hazards 2 | Flammability 1 | Physical hazards 0 | Personal protection - |

| | |
|---------------|--------------------------|
| Prepared By | SDS coordinator |
| Issue Date | 30-Jun-2015 |
| Revision Date | 01-Mar-2018 |
| Revision Note | No information available |

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Issue Date 08-Jun-2015

Revision Date 08-Jan-2018

Version 1

1. IDENTIFICATION

Product identifier

Product Name Tuffbond 314B

Other means of identification

Product Code MS-314B

UN/ID no. None

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Hardener.

Uses advised against None known

Details of the supplier of the safety data sheet

Manufacturer Address

Hernon Manufacturing Inc.
121 Tech Drive
Sanford, FL 32771
800-527-0004

Emergency telephone number

Company Phone Number 407-322-4000

Emergency Telephone Chemtel 800-255-3924

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|------------|
| Acute toxicity - Dermal | Category 4 |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Respiratory sensitization | Category 1 |
| Skin sensitization | Category 1 |
| Reproductive toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 1 |
| Specific target organ toxicity (repeated exposure) | Category 1 |

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if swallowed
Harmful in contact with skin
Causes skin irritation
Causes serious eye damage
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child
 Causes damage to organs
 Causes damage to organs through prolonged or repeated exposure



Appearance No information available

Physical state Liquid

Odor Aminic

Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Wash face, hands and any exposed skin thoroughly after handling
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Do not eat, drink or smoke when using this product

Precautionary Statements - Response

Specific treatment (see on this label)
 IF exposed: Call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician
 IF ON SKIN: Wash with plenty of soap and water
 Call a POISON CENTER or doctor/physician if you feel unwell
 Take off contaminated clothing and wash before reuse
 If skin irritation or rash occurs: Get medical advice/attention
 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|--|------------|----------|--------------|
| Fatty acids, tall-oil, reaction products with tetraethylenepentamine | 68953-36-6 | 60 - 100 | * |
| Tetraethylenepentamine | 112-57-2 | 10 - 30 | * |
| Triethylene tetramine | 112-24-3 | 1 - 5 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| | |
|---------------------|--|
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse. |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. |
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell. |

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. Collect spillage. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

| | |
|--------------------------------|--|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. After cleaning, flush away traces with water. |

7. HANDLING AND STORAGE**Precautions for safe handling**

| | |
|--------------------------------|--|
| Advice on safe handling | Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas. |
|--------------------------------|--|

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|---|
| Storage Conditions | Keep at temperatures between 7 and 29 °C. |
| Incompatible materials | Strong oxidizing agents. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

| | |
|----------------------------|---|
| Exposure Guidelines | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|----------------------------|---|

Appropriate engineering controls

| | |
|-----------------------------|---|
| Engineering Controls | Showers Eyewash stations Ventilation systems. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|---|
| Eye/face protection | Wear safety glasses with side shields (or goggles). |
| Skin and body protection | Wear protective gloves and protective clothing. Use rubber or plastic gloves. |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical state | Liquid | Odor | Aminic |
| Appearance | No information available | Odor threshold | No information available |
| Color | Amber | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------------------|--------------------------|--------------------------------|
| pH | Does not apply | |
| Melting point / freezing point | No information available | |
| Boiling point / boiling range | > 170 °C / 338 °F | |
| Flash point | > 93 °C / 200 °F | |
| Evaporation rate | No information available | |

| | |
|-------------------------------------|--------------------------|
| Flammability (solid, gas) | No information available |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit: | 1.4% |
| Vapor pressure | 133 Pa at 20°C (68°F) |
| Vapor density | No information available |
| Relative density | 0.94 |
| Water solubility | Partially soluble |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Kinematic viscosity | No information available |
| Dynamic viscosity | No information available |
| Explosive properties | No information available |
| Oxidizing properties | No information available |

Other Information

| | |
|-------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Density | No information available |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

| | |
|---------------------|--------------------|
| Inhalation | No data available. |
| Eye contact | No data available. |
| Skin contact | No data available. |
| Ingestion | No data available. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------------------------|----------------------|------------------------|-----------------|
| Tetraethylenepentamine 112-57-2 | = 3990 mg/kg (Rat) | = 660 µL/kg (Rabbit) | - |
| Triethylene tetramine 112-24-3 | = 2500 mg/kg (Rat) | = 550 mg/kg (Rabbit) | - |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 568.00 mg/kg
ATEmix (dermal) 1,100.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|------------------------------------|--|--|------------------------------------|
| Tetraethylenepentamine 112-57-2 | 2.1: 72 h Pseudokirchneriella subcapitata mg/L EC50 | 420: 96 h Poecilia reticulata mg/L LC50 static | 24.1: 48 h Daphnia magna mg/L EC50 |
| Triethylene tetramine 112-24-3 | 2.5: 72 h Desmodesmus subspicatus mg/L EC50 20: 72 h Pseudokirchneriella subcapitata mg/L EC50 3.7: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 495: 96 h Pimephales promelas mg/L LC50 570: 96 h Poecilia reticulata mg/L LC50 semi-static | 31.1: 48 h Daphnia magna mg/L EC50 |

Persistence and degradability

No information available.

Bioaccumulation

| Chemical Name | Partition coefficient |
|------------------------------------|-----------------------|
| Tetraethylenepentamine 112-57-2 | <1 |
| Triethylene tetramine 112-24-3 | -1.4 |

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

| | |
|----------------------|--|
| <u>DOT</u> | Not regulated |
| UN/ID no. | None |
| Proper shipping name | Not regulated |
| Hazard Class | None |
| Packing Group | None |
| Special Provisions | None |
| <u>IATA</u> | |
| UN/ID no. | UN 3082 |
| Proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine) |
| Hazard Class | 9 |
| Packing Group | III |
| Special Provisions | None |
| <u>IMDG</u> | |
| UN/ID no. | UN 3082 |
| Proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (Fatty acids, tall-oil, reaction products with tetraethylenepentamine) |
| Hazard Class | 9 |
| Packing Group | III |
| Special Provisions | None |

15. REGULATORY INFORMATION

International Inventories

| | |
|----------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

All ingredients are on the inventory or are exempt from listing.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|----|
| Acute health hazard | No |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| Tetraethylenepentamine 112-57-2 | X | X | X |
| Triethylene tetramine 112-24-3 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

| |
|--|
| 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION |
|--|

| | | | | |
|--------------------|-------------------|----------------|--------------------|------------------------------------|
| <u>NFPA</u> | Health hazards - | Flammability - | Instability - | Physical and Chemical Properties - |
| <u>HMIS</u> | Health hazards 2* | Flammability 1 | Physical hazards 0 | Personal protection - |

| | |
|---------------|--------------------------|
| Prepared By | SDS coordinator |
| Issue Date | 08-Jun-2015 |
| Revision Date | 08-Jan-2018 |
| Revision Note | No information available |

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet