

SAFETY DATA SHEET

PETTIT



Revision Date 06-Sep-2016
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Pettit EZ-Bond - 7080 & 7081
Product code 1708020AANDB

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use 2-Part Epoxy Compound
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier Kop-Coat, Inc. / Pettit Marine Paint
Marine Group
36 Pine Street
Rockaway, NJ 07866
1-800-221-4466

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

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

2.2 Label elements

Signal Word

Warning

Hazard Statements

Causes skin irritation
Causes serious eye irritation

May cause an allergic skin reaction



Precautionary Statements - Prevention

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

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 water and soap
 Take off contaminated clothing and wash it 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

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity

< 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

This product is a mixture. Health hazard information is based on its components.

Mixture

Chemical Name	CAS-No	Weight %
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	25068-38-6	90 - 100

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

4. First aid measures

4.1 Description of first-aid measures

General advice

Show this safety data sheet to the doctor in attendance. When symptoms persist or in all cases of doubt seek medical advice.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician or poison control center immediately.

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a poison control center or doctor for treatment advice. Wash contaminated clothing before reuse.

Inhalation

Move victim to fresh air. Apply artificial respiration if victim is not breathing. Call a physician or poison control center immediately.

Ingestion If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 2.2, Label Elements and/or Section 11, Toxicological effects.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician There is no specific antidote for effects from overexposure to this material. Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, fog, Carbon dioxide (CO₂), foam or dry chemical. Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire.

Unsuitable Extinguishing Media None known based on information supplied.

5.2 Special hazards arising from the substance or mixture

Special Hazard

Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Combustion Products Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.3 Advice for firefighters

Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. As in any fire, wear self-contained breathing apparatus and full protective gear. Thoroughly decontaminate all protective equipment after use. Use water spray to cool fire-exposed containers.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment. Stop leak if you can do it without risk. Refer to protective measures listed in sections 7 and 8. Avoid exceeding of the given occupational exposure limits (see section 8). Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Use according to package label instructions. Empty containers may retain product residue or vapor.
Hygiene measures	Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep away from food, drink and animal feedingstuffs. Keep from freezing.
Materials to Avoid	No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

8.2 Appropriate engineering controls

Engineering Measures	Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
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8.3 Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses with side-shields.
Skin and body protection	Wear protective gloves/ protective clothing. Remove and wash contaminated clothing before re-use.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
Hygiene measures	See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Paste/Gel Liquid
Appearance	Paste
Color	Clear
Odor	Slight
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH		No information available
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point	149 °C / 300 °F	
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	1.1	
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic	150,000-250,000 cps @ 25 deg C	
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content No information available

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

No information available.

10.5 Incompatible Materials

No materials to be especially mentioned.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity**Numerical measures of toxicity: Product Information**

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 25068-38-6	11400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-

11.2 Information on toxicological effects**Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

Serious eye damage/eye irritationProduct Information

- No information available

Component Information

- No information available

Respiratory or skin sensitizationProduct Information

- No information available

Component Information

- No information available

Germ cell mutagenicityProduct Information

- No information available

Component Information

- No information available

CarcinogenicityProduct Information

- No information available

Component Information

- No information available

Reproductive toxicityProduct Information

- No information available

Component Information

- No information available

STOT - single exposure

No information available

STOT - repeated exposure

- No information available

Other adverse effectsProduct Information

- No information available
- Component Information
- No information available

Aspiration hazardProduct Information

- No information available
- Component Information
- No information available

12. Ecological information

12.1 Toxicity**Ecotoxicity**

No information available

< 1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 25068-38-6	-	LC50: 96 h Fish 1.3 mg/L	LC50: 48 h daphnia 2.1 mg/L

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 25068-38-6	2.64-3.78

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

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

14. Transport Information

DOT

Not regulated

MEX

no data available

IMDG**Proper shipping name**

UN3082, Environmentally hazardous substance, liquid, n.o.s. (liquid epoxy resin), 9, PGIII, Marine Pollutant

IATA

Proper shipping name UN3082, Environmentally hazardous substance, liquid, n.o.s. (liquid epoxy resin), 9, PGIII

15. Regulatory information

15.1 International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

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

DSL - Canadian Domestic Substances List

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

PICCS - Philippines Inventory of Chemicals and 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

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. 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

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

16. Other information

NFPA	Health Hazard 2	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)

DOT (Department of Transportation)

EPA (Environmental Protection Agency)

IARC (International Agency for Research on Cancer)

International Air Transport Association (IATA)

International Maritime Dangerous Goods (IMDG)

NIOSH (National Institute for Occupational Safety and Health)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL (Permissible Exposure Limit)

Reportable Quantity (RQ)

Skin designation (S)*

STEL (Short Term Exposure Limit)

TLV® (Threshold Limit Value)

TWA (time-weighted average)

Revision Date 06-Sep-2016

Revision Note
No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

PETTIT



Revision Date 06-Sep-2016
Version 1

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name Pettit EZ Bond - Part B
Product code 1708120

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use 2-Part Epoxy Copmpound
Restrictions on use No information available

1.3 Details of the supplier of the safety data sheet

Supplier Kop-Coat, Inc. / Pettit Marine Paint
Marine Group
36 Pine Street
Rockaway, NJ 07866
1-800-221-4466

1.4 Emergency telephone number

Emergency telephone number Chemtrec: +1 703-527-3887 ex-USA
Chemtrec: 1-800-424-9300 USA

2. Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
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 3

2.2 Label elements

Signal Word

Danger

Hazard Statements

Harmful if swallowed

Harmful in contact with skin

Harmful if inhaled

Causes severe skin burns and 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

May cause respiratory irritation. May cause drowsiness or dizziness



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

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Keep/Store away from clothing/ combustible materials

Precautionary Statements - Response

Immediately 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

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards Hazards not otherwise classified (HNOC)

Not Applicable

2.4 Other information

Not Applicable

Unknown Acute Toxicity

< 1% of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/Information on Ingredients

Substance

This product is a mixture. Health hazard information is based on its components.

Mixture

Chemical Name	CAS-No	Weight %
Polyamide polymer	Proprietary	60 - 70
4-NONYLPHENOL	84852-15-3	30 - 40
TRIETHYLENETETRAMINE	112-24-3	5 - 10

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

4. First aid measures

4.1 Description of first-aid measures

General advice	Show this safety data sheet to the doctor in attendance. When symptoms persist or in all cases of doubt seek medical advice. For further assistance, contact your local Poison Control Center.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician or poison control center immediately. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Call a poison control center or doctor for treatment advice.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a poison control center or doctor for treatment advice. Wash contaminated clothing before reuse.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Call a physician or poison control center immediately. Extreme asthmatic reactions that may occur in sensitized persons can be life threatening. Administer oxygen if breathing is difficult. The effect of inhalation may be delayed.
Ingestion	If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	See Section 2.2, Label Elements and/or Section 11, Toxicological effects. Isocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes of the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.
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4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	There is no specific antidote for effects from overexposure to this material. Treat symptomatically.
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5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, fog, Carbon dioxide (CO₂), foam or dry chemical. Water may be used to cool and prevent the rupture of containers that are exposed to the heat from a fire.

Unsuitable Extinguishing Media None known based on information supplied.

5.2 Special hazards arising from the substance or mixture

Special Hazard

Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Combustion Products Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

5.3 Advice for firefighters

Evacuate personnel to safe areas. Move non-burning material, as feasible, to a safe location as soon as possible. As in any fire, wear self-contained breathing apparatus and full protective gear. Thoroughly decontaminate all protective equipment after use. Use water spray to cool fire-exposed containers.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas. Use personal protective equipment. Stop leak if you can do it without risk. Refer to protective measures listed in sections 7 and 8. Avoid exceeding of the given occupational exposure limits (see section 8). Personal protection needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the training and the expertise of employees in the area responding to the spill.

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological information.

6.3 Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Clean contaminated surface thoroughly.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Use according to package label instructions. Empty containers may retain product residue or vapor. No smoking. Do not breathe vapors or spray mist.

Hygiene measures Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep away from food, drink and animal feedingstuffs. Keep from freezing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Store in accordance with local regulations.

Materials to Avoid

No materials to be especially mentioned.

8. Exposure controls/personal protection

8.1 Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	British Columbia	Alberta	Quebec	Ontario TWAEV
TRIETHYLENETETRA MINE 112-24-3	-	-				TWA: 0.5 ppm TWA: 3 mg/m ³ Skin

8.2 Appropriate engineering controls**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use adequate ventilation to maintain airborne concentrations at levels below permissible or recommended occupational exposure limits.

8.3 Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Safety glasses with side-shields. If splashes are likely to occur, wear:. Tightly fitting safety goggles.

Skin and body protection

Wear protective gloves/ protective clothing. Remove and wash contaminated clothing before re-use. Solvent-resistant gloves. Nitrile rubber. Neoprene gloves. Impervious butyl rubber gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Wear suitable protective clothing.

Respiratory protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

See section 7 for more information

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Paste/Gel Liquid
Appearance	Paste
Color	Amber
Odor	Slight ammonia
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH		No information available
Melting/freezing point		No information available
Boiling point/boiling range		No information available
Flash Point		No information available
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Flammability Limits in Air		
upper flammability limit		No information available
lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Specific Gravity	0.72 g/cc	
Water solubility		No information available
Solubility in other solvents		No information available
Partition coefficient		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic		No information available
Viscosity, dynamic	200,000-300,000 cps	
Explosive properties		No information available
Oxidizing Properties		No information available

9.2 Other information

Volatile organic compounds (VOC) content No information available

10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to Avoid

No information available.

10.5 Incompatible Materials

No materials to be especially mentioned.

10.6 Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

11. Toxicological information

11.1 Acute toxicity**Numerical measures of toxicity: Product Information**

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

Unknown Acute Toxicity < 1% of the mixture consists of ingredient(s) of unknown toxicity

Oral LD50	7,549.00 mg/kg
Dermal LD50	10,368.00 mg/kg
LC50 (Dust/Mist)	264.40 mg/l
LC50 (Vapor)	220.00 mg/l

Numerical measures of toxicity: Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
4-NONYLPHENOL 84852-15-3	580 mg/kg (Rat)	= 2031 mg/kg (Rabbit)	-
TRIETHYLENETETRAMINE 112-24-3	2500 mg/kg (Rat)	= 550 mg/kg (Rabbit)	-

11.2 Information on toxicological effects**Skin corrosion/irritation**Product Information

- No information available

Component Information

- No information available

Serious eye damage/eye irritationProduct Information

- No information available

Component Information

- No information available

Respiratory or skin sensitizationProduct Information

- Isocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes of the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

Component Information

- No information available

Germ cell mutagenicityProduct Information

- No information available

Component Information

- No information available

CarcinogenicityProduct Information

- The table below indicates whether each agency has listed any ingredient as a carcinogen

Component Information

- Contains a known or suspected carcinogen

Reproductive toxicityProduct Information

- No information available

Component Information

- No information available

STOT - single exposure

No information available

STOT - repeated exposure

- No information available

Other adverse effectsProduct Information

- No information available

Component Information

- No information available

Aspiration hazardProduct Information

- No information available

Component Information

- No information available

12. Ecological information

12.1 Toxicity**Ecotoxicity**

No information available

65 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Ecotoxicity effects

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
4-NONYLPHENOL 84852-15-3	EC50: 96 h Pseudokirchneriella subcapitata 0.36 - 0.48 mg/L static EC50: 72 h Pseudokirchneriella subcapitata 0.16 - 0.72 mg/L static EC50: 72 h Desmodesmus subspicatus 1.3 mg/L	LC50: 96 h Pimephales promelas 0.135 mg/L flow-through LC50: 96 h Lepomis macrochirus 0.1351 mg/L flow-through	EC50: 48 h Daphnia magna 0.14 mg/L
TRIETHYLENETETRAMINE 112-24-3	EC50: 72 h Desmodesmus subspicatus 2.5 mg/L EC50: 72 h Pseudokirchneriella subcapitata 20 mg/L EC50: 96 h Pseudokirchneriella subcapitata 3.7 mg/L	LC50: 96 h Poecilia reticulata 570 mg/L semi-static LC50: 96 h Pimephales promelas 495 mg/L	EC50: 48 h Daphnia magna 31.1 mg/L

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Discharge into the environment must be avoided

Chemical Name	log Pow
TRIETHYLENETETRAMINE 112-24-3	-1.4

12.4 Mobility in soil

No information available.

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1 Waste treatment methods

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

14. Transport Information

DOT Marine Pollutant	Not regulated This product contains a chemical which is listed as a marine pollutant according to DOT
MEX	Not regulated
IMDG	Not regulated
IATA	Not regulated

15. Regulatory information

15.1 International Inventories

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

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

DSL - Canadian Domestic Substances List

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

PICCS - Philippines Inventory of Chemicals and 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

NZIoC - New Zealand Inventory of Chemicals

15.2 U.S. 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

15.3 Pesticide Information

Not applicable

15.4 U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

16. Other information

NFPA	Health Hazard 3	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 3*	Flammability 1	Physical Hazard 0	Personal protection X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

Ceiling (C)
DOT (Department of Transportation)
EPA (Environmental Protection Agency)
IARC (International Agency for Research on Cancer)
International Air Transport Association (IATA)
International Maritime Dangerous Goods (IMDG)
NIOSH (National Institute for Occupational Safety and Health)
NTP (National Toxicology Program)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
Reportable Quantity (RQ)
Skin designation (S)*
STEL (Short Term Exposure Limit)
TLV® (Threshold Limit Value)
TWA (time-weighted average)

Revision Date 06-Sep-2016

Revision Note
No information available

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet