

Safety Data Sheet

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Document group: 35-9621-0 **Version number:** 1.00 **Issue Date:** 18/11/2020 **Supersedes date:** Initial issue.

This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

IDENTIFICATION

1.1. Product identifier

Scotch-Weld™ Epoxy Structural Adhesive 3520 B/A: Kit

Product Identification Numbers

UU-0093-4565-1

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

1.3. Supplier's details

Address: 3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100

Telephone: 080-45543000, contact Product EHS team

E Mail: productehs.in@mmm.com
Website: http://solutions.3mindia.co.in

1.4. Emergency telephone number

080-45543000 (Contact hours: 8:00 AM to 5:00 PM)

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet for each of these components is included. Please do not separate the component Safety Data Sheets from this cover page. The document numbers of the MSDSs for components of this product are:

11-0297-9, 35-9199-7

TRANSPORT INFORMATION

Air Transport (IATA)Regulations

UN No Not applicable

Proper Shipping Name
Hazard Classs/Division
Not applicable
Not applicable

Subsidiary Risk Not applicable Packing Group: Not applicable

Marine Transport (IMDG)

UN No Not applicable

Proper Shipping Name Not applicable

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Scotch-WeldTM Epoxy Structural Adhesive 3520 B/A: Kit

Hazard Classs/Division Not applicable Subsidiary Risk Not applicable Packing Group: Not applicable

Environmental Hazards: Not applicable

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3M India SDSs are available at http://solutions.3mindia.co.in

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Safety Data Sheet

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 11-0297-9
 Version number:
 1.01

 Issue Date:
 18/11/2020
 Supersedes date:
 03/07/2019

This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

SECTION 1: Identification

1.1. Product identifier

3MTM Scotch-WeldTM Epoxy Structural Adhesive 3520 B/A, (Part B)

Product Identification Numbers

FS-9000-1514-0

1.2. Recommended use and restrictions on use

Recommended use

Part B of a Two-Component Structural Epoxy Adhesive, Structural adhesive.

1.3. Supplier's details

Address: 3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100

Telephone: 080-45543000, contact Product EHS team

E Mail: productehs.in@mmm.com
Website: http://solutions.3mindia.co.in

1.4. Emergency telephone number

080-45543000 (Contact hours: 8:00 AM to 5:00 PM)

SECTION 2: Hazard identification

Under MSIHC Rules, information is noted below on flammability, acute toxicity and explosivity relevant to this product. In line with international standards, information on other hazard classes and associated precautionary statements relevant to this product are included as well.

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2B.

Skin Corrosion/Irritation: Category 3.

Skin Sensitizer: Category 1.

Acute Aquatic Toxicity: Category 2. Chronic Aquatic Toxicity: Category 2.

2.2. Label elements

Signal Word

WARNING!

Symbols

Exclamation mark |Environment |







HAZARD STATEMENTS:

H320 Causes eye irritation. H316 Causes mild skin irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

P273 Avoid release to the environment.

Response:

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

Disposal:

P501 Dispose of contents/container in accordance with applicable

 $local/regional/national/international\ regulations.$

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Bisphenol A Diglycidyl Ether	1675-54-3	100

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eve contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

SubstanceConditionAldehydes.During combustion.Carbon monoxide.During combustion.Carbon dioxide.During combustion.Irritant vapours or gases.During combustion.

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing of vapours created during the cure cycle. Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat,

drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Store away from heat. Store away from strong bases. Store away from oxidising agents. Store away from amines.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Provide ventilated enclosure for curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:
Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

Wear respiratory protection if ventilation is inadequate to prevent overexposure. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state Liquid.

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Specific Physical Form:	Paste
Color	Yellow
Odor	Slight Odor
Odour threshold	No data available.
рН	Not applicable.
Melting point/Freezing point: NA	No data available.
Boiling point/Initial boiling point/Boiling range	>=200 °C
Flash point	>=150 °C [Test Method:Closed Cup]
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	Not applicable.
Flammable Limits(UEL)	Not applicable.
Vapour pressure	Not applicable.
Vapor Density and/or Relative Vapor Density	Not applicable.
Density	1.12 - 1.18 g/ml
Relative density	1.12 - 1.18 [<i>Ref Std</i> :WATER=1]
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	Not applicable.
Decomposition temperature	No data available.
Viscosity/Kinematic Viscosity	9,000 - 14,000 mPa-s [@ 25 °C]
Volatile organic compounds (VOC)	Not applicable.
Percent volatile	0 %
VOC less H2O & exempt solvents	Not applicable.

Nanoparticles

This material does not contain nanoparticles.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Alcohols.

Amines.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Vapours released during curing may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin contact

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eve contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Vapours released during curing may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Bisphenol A Diglycidyl Ether	Dermal	Rat	LD50 > 1,600 mg/kg
Bisphenol A Diglycidyl Ether	Ingestion	Rat	LD50 > 1,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Bisphenol A Diglycidyl Ether	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Bisphenol A Diglycidyl Ether	Rabbit	Moderate irritant

Sensitization:

Skin Sensitisation

Name	Species	Value

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Bisphenol A Diglycidyl Ether	Human and animal	Sensitising

Respiratory Sensitisation

Name	Species	Value
Bisphenol A Diglycidyl Ether	Human	Not classified

Germ Cell Mutagenicity

our mountaing		
Name	Route	Value
Bisphenol A Diglycidyl Ether	In vivo	Not mutagenic
Bisphenol A Diglycidyl Ether	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Bisphenol A Diglycidyl Ether	Dermal	Mouse	Some positive data exist, but the data are not
			sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Bisphenol A Diglycidyl Ether	Ingestion	Not classified for female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether	Ingestion	Not classified for male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A Diglycidyl Ether	Dermal	Not classified for development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Bisphenol A Diglycidyl Ether	Ingestion	Not classified for development	Rat	NOAEL 750 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Bisphenol A Diglycidyl Ether	Dermal	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	2 years
Bisphenol A Diglycidyl Ether	Dermal	nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Bisphenol A Diglycidyl Ether	Ingestion	auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 2: Toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 2: Toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Bisphenol A	1675-54-3	Rainbow trout	Estimated	96 hours	LC50	2 mg/l
Diglycidyl						
Ether						
Bisphenol A	1675-54-3	Water flea	Estimated	48 hours	EC50	1.8 mg/l
Diglycidyl						
Ether						
Bisphenol A	1675-54-3	Green Algae	Experimental	72 hours	EC50	>11 mg/l
Diglycidyl						
Ether						
Bisphenol A	1675-54-3	Green Algae	Experimental	72 hours	NOEC	4.2 mg/l
Diglycidyl						
Ether						
Bisphenol A	1675-54-3	Water flea	Experimental	21 days	NOEC	0.3 mg/l
Diglycidyl						
Ether						

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Bisphenol A	1675-54-3	Experimental		Hydrolytic	117 hours (t	Other methods
Diglycidyl		Hydrolysis		half-life	1/2)	
Ether						
Bisphenol A	1675-54-3	Experimental	28 days	BOD	5 %BOD/COD	OECD 301F -
Diglycidyl		Biodegradation				Manometric
Ether						respirometry

12.3: Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Bisphenol A	1675-54-3	Experimental		Log Kow	3.242	Other methods
Diglycidyl		Bioconcentrati				
Ether		on				

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other Adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerised) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

Air Transport (IATA)Regulations

UN No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

Hazard Classs/Division 9
Subsidiary Risk Not applicable

Packing Group: III

Marine Transport (IMDG)

UN No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

Hazard Classs/Division 9 Subsidiary Risk Not applicable

Packing Group: III

Environmental Hazards: Marine Pollutant: Yes

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Applicable Environmental, Health and Safety Regulations

The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989

Hazardous Waste(Management, Handling & Transboundary) Rules, 2008

Hazardous Chemicals (Classification, Packaging and Labelling Draft Rules), 2011

The following ingredients are listed as hazardous on Part II of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules
None.

The following ingredients are classified as hazardous based on the criteria listed under Part I of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules:

The product is classified as Non-Hazardous as per MSIHC Rules, 1989.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision information:

Company Telephone information was modified.

Section 1: Emergency telephone information was modified.

Label: GHS Classification information was modified.

Label: GHS Environmental Hazard Statements information was modified.

Section 2: Ingredient table information was modified.

Section 6: Accidental release clean-up information information was modified.

Section 8: Appropriate Engineering controls information information was modified.

Section 8: Personal Protection - Skin/body information information was modified.

Section 8: Skin protection - protective clothing information information was modified.

Section 8: Skin protection - recommended gloves information information was modified.

Section 09: Color information was added.

Section 09: Nanoparticle information was added.

Section 09: Odor information was added.

Sections 3 and 9: Odour, colour, grade information information was deleted.

Section 09: Percent Volatile information was added.

Section 9: Property description for optional properties information was deleted.

Section 09: Vapor Density Value information was added.

Section 9: Vapour density value information was deleted.

Section 9: Viscosity information information was deleted.

Section 09: Viscosity information was added.

Section 09: VOC Less H2O & Exempt Solvents information was added.

Section 09: Volatile Organic Compounds information was added.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Respiratory Sensitization Table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Skin Sensitization Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

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Section 12: Acute aquatic hazard information information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

Section 14: Environmental hazards information was modified.

Sectio 16: UK disclaimer information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M India SDSs are available at http://solutions.3mindia.co.in



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

SECTION 1: Identification

1.1. Product identifier

3M(tm) Scotch-Weld(tm) Epoxy Structural Adhesive 3520 B/A: Part A

1.2. Recommended use and restrictions on use

Recommended use

Industrial use.

1.3. Supplier's details

Address: 3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100

Telephone: 080-45543000, contact Product EHS team

E Mail: productehs.in@mmm.com
Website: http://solutions.3mindia.co.in

1.4. Emergency telephone number

080-45543000 (Contact hours: 8:00 AM to 5:00 PM)

SECTION 2: Hazard identification

Under MSIHC Rules, information is noted below on flammability, acute toxicity and explosivity relevant to this product. In line with international standards, information on other hazard classes and associated precautionary statements relevant to this product are included as well.

2.1. Classification of the substance or mixture

Acute Toxicity (oral): Category 5.

Serious Eye Damage/Irritation: Category 1.

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1.

Specific Target Organ Toxicity (single exposure): Category 3.

Acute Aquatic Toxicity: Category 1. Chronic Aquatic Toxicity: Category 1.

2.2. Label elements

Signal Word

DÄNGER!

Symbols

Corrosion | Exclamation mark | Environment |

Pictograms



HAZARD STATEMENTS:

H303 May be harmful if swallowed. H318 Causes serious eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280B Wear protective gloves and eye/face protection.

P273 Avoid release to the environment.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Disposal:

P501 Dispose of contents/container in accordance with applicable

local/regional/national/international regulations.

2.3. Other hazards

- May cause chemical gastrointestinal burns. All or part of the classification is based on toxicity test data.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Fatty acids, C18-unsaturated, dimers,	68911-25-1	40 - 70
polymers with 3,3'-		
oxybis(ethyleneoxy)bis(propylamine)		
Fatty acids, C18-unsaturated, dimers,	68082-29-1	30 - 60
oligomeric reaction products with tall-oil		
fatty acids and triethylenetetramine		
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	7 - 13
Triethylenetetramine	112-24-3	1 - 5

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If swallowed

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

SECTION 5: Fire-fighting measures

5.1. Suitable Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

SubstanceConditionAmine compounds.During combustion.Carbon monoxide.During combustion.Carbon dioxide.During combustion.

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not

remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing of dust created by cutting, sanding, grinding or machining. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Store away from acids. Store away from strong bases. Store away from oxidising agents.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Triethylenetetramine	112-24-3	AIHA	TWA:6 mg/m3(1 ppm)	SKIN

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full face shield.

Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

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If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Paste
Color	Amber
Odor	Slight Amine
Odour threshold	No data available.
рН	No data available.
Melting point/Freezing point: NA	No data available.
Boiling point/Initial boiling point/Boiling range	>=150 °C
Flash point	>=150 °C
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Vapour pressure	No data available.
Vapor Density and/or Relative Vapor Density	No data available.
Density	No data available.
Relative density	0.97 - 1.02 [<i>Ref Std:</i> WATER=1]
Water solubility	No data available.
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity/Kinematic Viscosity	8,000 - 12,000 mPa-s [@ 23 °C] [Test Method:Brookfield]
Volatile organic compounds (VOC)	
Percent volatile	
VOC less H2O & exempt solvents	

Nanoparticles

This material does not contain nanoparticles.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Strong acids.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin contact

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eve contact

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion

May be harmful if swallowed.

Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen.

Additional Health Effects:

Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE2,000 - 5,000 mg/kg
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)	Dermal	Rat	LD50 > 2,000 mg/kg
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)	Ingestion	Rat	LD50 > 2,000 mg/kg
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Dermal	Rat	LD50 > 2,000 mg/kg
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Ingestion	Rat	LD50 > 5,000 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Dermal	Rabbit	LD50 2,500 mg/kg
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Ingestion	Rat	LD50 3,160 mg/kg
Triethylenetetramine	Dermal	Rabbit	LD50 550 mg/kg
Triethylenetetramine	Ingestion	Rat	LD50 2,500 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value				
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-	Rat	Irritant				
oxybis(ethyleneoxy)bis(propylamine)						
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil	In vitro	Irritant				
fatty acids and triethylenetetramine	data					
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Rabbit	Corrosive				
Triethylenetetramine	Rabbit	Corrosive				

Serious Eye Damage/Irritation

Name	Species	Value
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)	In vitro data	Severe irritant
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine	Rabbit	Corrosive
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	similar health hazards	Corrosive
Triethylenetetramine	Rabbit	Corrosive

Sensitization:

Skin Sensitisation

Skiii Schsitisation		
Name	Species	Value
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-	Guinea	Sensitising
oxybis(ethyleneoxy)bis(propylamine)	pig	
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall-oil	Mouse	Sensitising
fatty acids and triethylenetetramine		
Triethylenetetramine	Guinea	Sensitising
	nio	

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Fatty acids, C18-unsaturated, dimers, polymers with 3,3'-oxybis(ethyleneoxy)bis(propylamine)	In Vitro	Not mutagenic

Carcinogenicity

For the component/components, either no data are currently available or the data are not sufficient for classification.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure
					Duration
Fatty acids, C18-unsaturated, dimers,	Ingestion	Not classified for female reproduction	Rat	NOAEL	premating
polymers with 3,3'-				1,000	into lactation
oxybis(ethyleneoxy)bis(propylamine)				mg/kg/day	
Fatty acids, C18-unsaturated, dimers,	Ingestion	Not classified for male reproduction	Rat	NOAEL	29 days
polymers with 3,3'-				1,000	
oxybis(ethyleneoxy)bis(propylamine)				mg/kg/day	
Fatty acids, C18-unsaturated, dimers,	Ingestion	Not classified for development	Rat	NOAEL	premating
polymers with 3,3'-		•		1,000	into lactation
oxybis(ethyleneoxy)bis(propylamine)				mg/kg/day	

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethyleneoxy)bis(pro pylamine)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	Irritation Positive	
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethyleneoxy)bis(pro pylamine)	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL Not available	
3,3'- Oxybis(ethyleneoxy)bis(propylamine)	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethyleneoxy)bis(pr opylamine)	Ingestion	heart skin endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system liver immune system muscles nervous system eyes kidney and/or bladder respiratory system vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	29 days

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information

on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 1: Very toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 1: Very toxic to aquatic life with long lasting effects.

No product test data available.

Material	CAS Nbr	Organism	Туре	Exposure	Test endpoint	Test result
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethylen eoxy)bis(propy lamine)	68911-25-1	Fathead minnow	Experimental	96 hours	Lethal Level 50%	2.16 mg/l
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethylen eoxy)bis(propy lamine)	68911-25-1	Green algae	Experimental	72 hours	Effect Level 50%	0.43 mg/l
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethylen eoxy)bis(propy lamine)	68911-25-1	Water flea	Experimental	48 hours	Effect Level 50%	0.57 mg/l
Fatty acids, C18- unsaturated, dimers, polymers with 3,3'- oxybis(ethylen	68911-25-1	Green algae	Experimental	72 hours	No obs Effect Level	0.28 mg/l

eoxy)bis(propy						
lamine)	(0002 20 1	C 1	F	72.1	E050	4.24 /1
Fatty acids, C18-	68082-29-1	Green algae	Experimental	72 hours	EC50	4.34 mg/l
unsaturated,						
dimers,						
oligomeric						
reaction						
products with						
tall-oil fatty						
acids and						
triethylenetetra						
mine						
	68082-29-1	Water flea	Erm anim antal	40 h a	EC50	7.07 ~/1
,	68082-29-1	water flea	Experimental	48 hours	EC30	7.07 mg/l
C18-						
unsaturated,						
dimers,						
oligomeric						
reaction						
products with						
tall-oil fatty						
acids and						
triethylenetetra						
mine						
Fatty acids,	68082-29-1	Zebra Fish	Experimental	96 hours	LC50	7.07 mg/l
C18-						
unsaturated,						
dimers,						
oligomeric						
reaction						
products with						
tall-oil fatty						
acids and						
triethylenetetra						
mine						
Fatty acids,	68082-29-1	Green algae	Experimental	72 hours	NOEC	0.5 mg/l
C18-			-			
unsaturated,						
dimers,						
oligomeric						
reaction						
products with						
tall-oil fatty						
acids and						
triethylenetetra						
mine						
3,3'-	4246-51-9	Golden Orfe	Experimental	96 hours	LC50	>1,000 mg/l
Oxybis(ethylen	T470-J1-7 	Golden Olle	Lapermientai	70 Hours		- 1,000 mg/1
eoxy)bis(propy						
lamine)	4246 51 0	Cnaar -1-	E-marine (1	72 hazze	EC50	> 500 m = /1
/	4246-51-9	Green algae	Experimental	72 hours	EC50	>500 mg/l
Oxybis(ethylen						
eoxy)bis(propy						
lamine)	1016.51.0	XX / A	D	40.1	F.G.50	010.16
3,3'-	4246-51-9	Water flea	Experimental	48 hours	EC50	218.16 mg/l

Oxybis(ethylen eoxy)bis(propy lamine)						
3,3'- Oxybis(ethylen eoxy)bis(propy lamine)	4246-51-9	Green algae	Experimental	72 hours	Effect Concentration 10%	5.4 mg/l
Triethylenetetra mine	112-24-3	Green Algae	Experimental	72 hours	EC50	27.4 mg/l
Triethylenetetra mine	112-24-3	Guppy	Experimental	96 hours	LC50	570 mg/l
Triethylenetetra mine	112-24-3	Water flea	Experimental	48 hours	EC50	37.4 mg/l
Triethylenetetra mine	112-24-3	Green Algae	Experimental	72 hours	NOEC	0.468 mg/l
Triethylenetetra mine	112-24-3	Water flea	Experimental	21 days	NOEC	2.86 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Fatty acids,	68911-25-1	Experimental	28 days	BOD	0 %	OECD 301F -
C18-		Aquatic			BOD/ThBOD	Manometric
unsaturated,		Biodegrad				respirometry
dimers,		Aerobic				
polymers with						
3,3'-						
oxybis(ethylen						
eoxy)bis(propy						
lamine)						
Fatty acids,	68082-29-1	Estimated	28 days	% CO2	≤8 % weight	OECD 301B - Modified
C18-		Biodegradation		produced		sturm or CO2
unsaturated,						
dimers,						
oligomeric						
reaction						
products with						
tall-oil fatty						
acids and						
triethylenetetra						
mine						
3,3'-	4246-51-9	Estimated		Photolytic half-	2.96 hours (t	Other methods
Oxybis(ethylen		Photolysis		life (in air)	1/2)	
eoxy)bis(propy						
lamine)						
3,3'-	4246-51-9	Experimental	25 days	CO2 evolution	-8 %CO2	OECD 301B - Modified
Oxybis(ethylen		Biodegradation			evolution/THC	sturm or CO2
eoxy)bis(propy					O2 evolution	
lamine)						
Triethylenetetra	112-24-3	Experimental	20 days	BOD	0 %	OECD 301D - Closed
mine		Biodegradation			BOD/ThBOD	bottle test

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
'						

Fatty acids,	68911-25-1	Estimated		Bioaccumulatio	42	Other methods
C18-		Bioconcentrati		n factor		
unsaturated,		on				
dimers,						
polymers with 3,3'-						
oxybis(ethylen						
eoxy)bis(propy						
lamine)						
Fatty acids,	68082-29-1	Experimental		Log Kow	≤3.55	Other methods
C18-		Bioconcentrati				
unsaturated,		on				
dimers,						
oligomeric						
reaction						
products with						
tall-oil fatty						
acids and						
triethylenetetra						
mine						
3,3'-	4246-51-9	Experimental		Log Kow	-1.25	Other methods
Oxybis(ethylen		Bioconcentrati				
eoxy)bis(propy		on				
lamine)						
Triethylenetetra	112-24-3	Experimental	42 days	Bioaccumulatio	< 5.0	OECD 305E -
mine		BCF-Carp		n factor		Bioaccumulation flow- through fish test

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other Adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

SECTION 14: Transport Information

Air Transport (IATA)Regulations

UN No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acids, tall oil, polymers with C18-unsatd. fatty acid dimers and triethylenetetramine)

Hazard Classs/Division 9

Subsidiary Risk Not applicable

Packing Group: III

Marine Transport (IMDG)

UN No UN3082

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acids, tall oil,

polymers with C18-unsatd. fatty acid dimers and triethylenetetramine)

Hazard Classs/Division 9 Subsidiary Risk Not applicable

Packing Group: III

Environmental Hazards: Marine Pollutant: Yes

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global inventory status

Contact 3M for more information.

Applicable Environmental, Health and Safety Regulations

The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 Hazardous Waste(Management, Handling & Transboundary) Rules, 2008 Hazardous Chemicals (Classification, Packaging and Labelling Draft Rules), 2011

The following ingredients are listed as hazardous on Part II of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules

None

The following ingredients are classified as hazardous based on the criteria listed under Part I of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules:

The product is classified as Non-Hazardous as per MSIHC Rules, 1989.

SECTION 16: Other information

NFPA Hazard Classification

Health: 3 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision information:

No revision information

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3M India SDSs are available at http://solutions.3mindia.co.in