



Safety Data Sheet

Issue Date 28-Aug-2018

Revision Date 01-Feb-2018

Revision Number 6

1. IDENTIFICATION

Product identifier

Product Code F047-0413A
Product Name TNEME-TAR TNEME-TAR BLACK

Other means of identification

Common Name SERIES 47, PART A
UN/ID no. 1263
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 816-474-3400
Distributor Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

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
Germ cell mutagenicity	Category 1A
Carcinogenicity	Category 1A
Reproductive Toxicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2
Flammable Liquids	Category 3

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation
Causes serious eye irritation
May cause genetic defects
May cause cancer
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
Flammable liquid and vapor

**Appearance** black**Physical state** liquid**Odor** aromatic**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 breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Use explosion-proof electrical/ventilating/lighting/equipment

Response

IF exposed or concerned: Get medical advice/attention
 specific treatment
 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 skin irritation occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

Store locked up
 Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

Very toxic to aquatic life with long lasting effects
 Acute Toxicity 12.73699 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
REFINED COAL TAR PITCH	65996-93-2	30 - <60%
TALC (RESPIRABLE DUST)	14807-96-6	10 - <30%
XYLENE	1330-20-7	10 - <30%
MAGNESITE	546-93-0	10 - <30%
ETHYL BENZENE	100-41-4	1 - <10%
POLYCYCLIC AROMATIC COMPOUNDS (PACS)	-	1 - <10%
MODIFIED ALIPHATIC AMINE	90-72-2	1 - <10%
PHENANTHRENE	85-01-8	0.1 - <1%

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

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician.
Inhalation	Remove to fresh air. If symptoms persist, call a physician.
Ingestion	If swallowed, do not induce vomiting. Get medical attention immediately.
Self-protection of the first aider	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons. Oxides of nitrogen. Sulfur oxides.

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. In the event of fire, wear self-contained breathing apparatus. Keep away from heat/sparks/open flames/hot surfaces. MAY CAUSE HEAT AND PRESSURE BUILD-UP IN CLOSED CONTAINERS. Solvent vapors are heavier than air and may spread along floors. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all sources of ignition.
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Environmental Precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
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Methods and material for containment and cleaning up

Methods for containment	Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.
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Methods for cleaning up If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with eyes, skin and clothing. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapours or spray mist. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not ingest. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

Incompatible products Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
REFINED COAL TAR PITCH 65996-93-2	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³	80 mg/m ³
TALC (RESPIRABLE DUST) 14807-96-6	TWA: 2 mg/m ³	TWA: 2 mg/m ³	1000 mg/m ³
XYLENE 1330-20-7	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 150 ppm STEL: 655 mg/m ³	
ETHYL BENZENE 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³	800 ppm
PHENANTHRENE 85-01-8	-	TWA: 0.2 mg/m ³	

Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses with side-shields If splashes are likely to occur, wear face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh

air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid	Odor	aromatic
Appearance	black	Odor threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
pH		
Melting point / freezing point	No data available	
Boiling point / boiling range	72 °C / 162 °F	
Flash point	34 °C / 94.0 °F	Pensky Martens - Closed Cup
Evaporation rate		
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit	NA	
Lower flammability limit	NA	
Vapor pressure		
Vapor density		
Specific gravity	1.30328	g/cm3
Water solubility	Insoluble in cold water	
Solubility in other solvents		
Partition coefficient: n-octanol/water		
Autoignition temperature	No data available	
Decomposition temperature		
Kinematic viscosity		
Dynamic viscosity	12500 centipoises	approx

Other Information

Density	10.86937 lbs/gal
Volatile organic compounds (VOC) content	2.28158 lbs/gal
Total volatiles weight percent	21.15 %
Total volatiles volume percent	31.65 %
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

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Oxides of nitrogen. Sulfur oxides. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. May cause irritation.
Eye contact	Causes serious eye irritation.
Skin contact	Irritating to skin. May cause sensitization by skin contact.
Ingestion	Harmful if swallowed.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
REFINED COAL TAR PITCH 65996-93-2	= 3300 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
XYLENE 1330-20-7	= 3500 mg/kg (Rat)	> 1700 mg/kg (Rabbit) > 4350 mg/kg (Rabbit)	= 29.08 mg/L (Rat) 4 h = 5000 ppm (Rat) 4 h
ETHYL BENZENE 100-41-4	= 3500 mg/kg (Rat)	= 15400 mg/kg (Rabbit)	= 17.4 mg/L (Rat) 4 h
MODIFIED ALIPHATIC AMINE 90-72-2	= 1200 mg/kg (Rat)	= 1280 mg/kg (Rat)	-
PHENANTHRENE 85-01-8	= 1.8 g/kg (Rat)	-	-

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

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

Irritation Irritating to eyes, respiratory system and skin.
Chronic Toxicity NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Cancer hazard. Contains coal tar which can cause cancer. (Risk of cancer depends on duration and level of exposure). Skin sensitizer. Substances known to be mutagenic to man. Substances known to impair fertility.
Sensitization May cause sensitization of susceptible persons.
Mutagenicity May cause genetic defects.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
REFINED COAL TAR PITCH 65996-93-2	A1	Group 1	Known	X
TALC (RESPIRABLE DUST) 14807-96-6		Group 2B Group 3	-	
XYLENE 1330-20-7		Group 3	-	
ETHYL BENZENE 100-41-4	A3	Group 2B	-	X
PHENANTHRENE 85-01-8		Group 3	-	

Reproductive effects May damage fertility or the unborn child.
STOT - single exposure Eyes, Skin, Central Nervous System (CNS)
STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects Bladder, Central nervous system, Central Vascular System (CVS), Eyes, kidney, liver, Lungs, respiratory system, Skin, blood, Gastrointestinal tract.

Aspiration hazard No information available.

Acute Toxicity 12.73699 % of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

25.033728609 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
TALC (RESPIRABLE DUST) 14807-96-6		100: 96 h Brachydanio rerio g/L LC50 semi-static	
XYLENE 1330-20-7		LC50= 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50= 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50= 780 mg/L Cyprinus carpio 96 h LC50 > 780 mg/L Cyprinus carpio 96 h LC50 30.26 - 40.75 mg/L Poecilia reticulata 96 h	EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h
ETHYL BENZENE 100-41-4	4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Lepomis macrochirus mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	1.8 - 2.4: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Chemical name	log Pow
REFINED COAL TAR PITCH 65996-93-2	6.04
XYLENE 1330-20-7	2.77
ETHYL BENZENE 100-41-4	3.118
MODIFIED ALIPHATIC AMINE 90-72-2	0.219
PHENANTHRENE 85-01-8	4.5

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods Keep container tightly closed. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

US EPA Waste Number

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
XYLENE 1330-20-7		Included in waste stream: F039		U239
ETHYL BENZENE 100-41-4		Included in waste stream: F039		
PHENANTHRENE 85-01-8		Included in waste stream: F039		
PYRENE 129-00-0		Included in waste stream: F039		
ACENAPHTHENE 83-32-9		Included in waste streams: F039		
NAPHTHALENE 91-20-3	U165	Included in waste streams: F024, F025, F034, F039, K001, K035, K060, K087, K145		U165

California Hazardous Waste Status

Chemical name	CAWAST
XYLENE 1330-20-7	Toxic Ignitable
ETHYL BENZENE 100-41-4	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID no. 1263
 Proper Shipping Name PAINT
 Hazard Class 3
 Packing Group III
 Emergency Response Guide Number 128

Additional information Call TNAMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDL Complies
 EINECS/ELINCS Does Not Comply
 ENCS Does Not Comply
 IECSC Complies
 KECL Does Not Comply
 PICCS Does Not Comply

AICS Does Not Comply

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU 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

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

Chemical name	HAPS Data
REFINED COAL TAR PITCH	
XYLENE	
ETHYL BENZENE	

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
XYLENE - 1330-20-7	1.0
ETHYL BENZENE - 100-41-4	0.1
POLYCYCLIC AROMATIC COMPOUNDS (PACS) -	0.1
PHENANTHRENE - 85-01-8	1.0

SARA 311/312 Hazardous

Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
XYLENE 1330-20-7	100 lb			X
ETHYL BENZENE 100-41-4	1000 lb	X	X	X
PHENANTHRENE 85-01-8			X	

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs	RQ
XYLENE 1330-20-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ
ETHYL BENZENE 100-41-4	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
POLYCYCLIC AROMATIC COMPOUNDS (PACS)	-	1	
PHENANTHRENE 85-01-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

California Prop. 65

WARNING: This product can expose you to the following chemicals which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical name	California Prop. 65

ETHYL BENZENE - 100-41-4	Carcinogen
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
NAPHTHALENE - 91-20-3	Carcinogen

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Chemical name	New Jersey	Massachusetts	Pennsylvania
REFINED COAL TAR PITCH 65996-93-2	X	X	X
TALC (RESPIRABLE DUST) 14807-96-6	X	X	X
XYLENE 1330-20-7	X	X	X
MAGNESITE 546-93-0	X	X	
ETHYL BENZENE 100-41-4	X	X	X
PHENANTHRENE 85-01-8	X	X	X

16. OTHER INFORMATION

NFPA Health 3 Flammability 3 Instability 1 Physical hazard *
HMIS (Hazardous Material Information System) Health 3* Flammability 3 Reactivity 1

Prepared By Tnemec Regulatory Dept: 816-474-3400
 Revision Date 01-Feb-2018

Revision Summary
 9 4 5 7 10 11 14 13 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of SDS



Safety Data Sheet

Issue Date 11-Jul-2016

Revision Date 11-Jul-2016

Revision Number 5

1. IDENTIFICATION

Product identifier

Product Code F047-0413B
Product Name TNEME-TAR TNEME-TAR BLACK

Other means of identification

Common Name SERIES 47, PART B

Recommended use of the chemical and restrictions on use

Recommended Use industrial paint.
Uses advised against Consumer use, For professional use only. Not for residential use.

Details of the supplier of the safety data sheet

Manufacturer Address Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372 816-474-3400
Distributor Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203, Boisbriand, Quebec Canada J7G 2T3

Emergency telephone number

Company Phone Number Tnemec Regulatory Dept: 816-474-3400
24 Hour Emergency Phone Number 800-535-5053 (Infotrac)

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 2A
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 light yellow

Physical state liquid

Odor Slight

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

Response

Get medical advice/attention if you feel unwell
 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

Storage

Keep away from children
 Store in a dry place. Store in a closed container

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

May be harmful if swallowed
 May be harmful in contact with skin
 Toxic to aquatic life with long lasting effects
 SEE SAFETY DATA SHEET

Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
EPOXY RESIN (LER)	25085-99-8	60 - 100%

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

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Rinse mouth. Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult a physician or poison control center IMMEDIATELY. Treat symptomatically.
Self-protection of the first aider	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapours In the event of fire and/or explosion do not breathe fumes

Hazardous combustion products Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

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

Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment. Avoid contact with eyes, skin and clothing.

Environmental Precautions

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment

Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing of vapors and use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

Methods for cleaning up

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Wear personal protective equipment. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Avoid dust formation in confined areas. Keep away from heat, sparks and open flame. - No smoking. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

Conditions for safe storage, including any incompatibilities

Storage

Protect from sunlight and store in well-ventilated place. Keep out of the reach of children.

Incompatible products

Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parametersExposure guidelines
Appropriate engineering controls

Engineering measures Sufficient ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limits (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Use chemical resistant splash type goggles. If splashes are likely to occur, wear face-shield.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIESInformation on basic physical and chemical properties

Physical state	liquid	Odor	Slight
Appearance	light yellow	Odor threshold	No information available
Color	No information available		
Property	Values	Remarks	
pH		No data available	
Melting point / freezing point		No data available	
Boiling point / boiling range	72 °C / 162 °F		
Flash point	No information available		
Evaporation rate		No data available	
Flammability (solid, gas)		No information available	
Flammability Limit in Air		No data available	
Upper flammability limit	NA		
Lower flammability limit	NA		
Vapor pressure		No data available	
Vapor density		No data available	
Specific gravity	1.15707	g/cm ³	
Water solubility	Insoluble in cold water		
Solubility in other solvents		No data available	
Partition coefficient: n-octanol/water		No data available	
Autoignition temperature		No data available	
Decomposition temperature		No data available	
Kinematic viscosity		No data available	
Dynamic viscosity		No data available	
Other Information			
Density	9.64999 lbs/gal		

Volatile organic compounds (VOC) content 0 lbs/gal
Total volatiles weight percent 0 %
Total volatiles volume percent 0 %

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

Heat, flames and sparks.

Incompatible materials

Acids

Hazardous decomposition products

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. Carbon oxides. Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. May cause irritation.
Eye contact	Causes serious eye irritation.
Skin contact	Irritating to skin. May cause sensitization by skin contact.
Ingestion	Harmful if swallowed.

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Skin disorders. Irritating to eyes and skin.

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

Irritation	Irritating to eyes, respiratory system and skin.
Chronic Toxicity	Avoid repeated exposure. Skin sensitizer.
Sensitization	May cause sensitization of susceptible persons.
Mutagenicity	No information available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	No information available.
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Aspiration hazard	No information available.

Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
EPOXY RESIN (LER) 25085-99-8	11 mg/L 72 hr	2 mg/L 96 hr Oncorhynchus mykiss	1.8 mg/L 48h

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal Methods

It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name

PAINT & RELATED MATERIAL

IATA

Additional information

Call TNAMEC Traffic Department - 816-474-3400 for additional information or other modes of Transportation.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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 Commercial Chemical Substances/EU 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

United States of America

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 and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous

Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Does Not Contain Photochemically Reactive Solvent

State Right-to-Know

16. OTHER INFORMATION

<u>NFPA</u>	Health 2	Flammability 1	Instability 1	Physical hazard -
<u>HMIS (Hazardous Material Information System)</u>	Health 2	Flammability 1	Reactivity 1	

Prepared By Tnemec Regulatory Dept: 816-474-3400
 Revision Date 11-Jul-2016
 Revision Summary
 9 4 5 6 7 10 8 11 14 15

Disclaimer

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its subsidiaries assume any liability whatsoever for the accuracy of completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

End of SDS