

Material Safety Data Sheet

Print Date 06-May-2011

Revision Date 06-May-2011

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product code S273-0273A
Trade name STRANLOK ML PALE
Product Class POLYAMINE PAINT

Manufacturer Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
Emergency telephone 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

HARMFUL IF INHALED.
CAUSES SKIN AND EYE BURNS.
HARMFUL OR FATAL IF SWALLOWED.
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.

Potential health effects

Principle Routes of Exposure Eye contact, Inhalation, Skin contact.

Acute effects

Eyes Causes burns.
Skin Causes burns. May cause sensitization by skin contact.
Inhalation Irritating to respiratory system. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
Ingestion May be harmful if swallowed.

Chronic effects

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 crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Skin disorders. Respiratory disorders.

Interactive effects No information available

Potential environmental effects See Section 12 for additional Ecological Information

Target Organ Effects Eyes, Lungs, Respiratory system, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
EPOXY RESIN (LER)	25085-99-8	30 - 60
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	10 - 30
TITANIUM DIOXIDE (TOTAL DUST)	13463-67-7	10 - 30
NONYLPHENOL	84852-15-3	1 - 5
BENZYL ALCOHOL	100-51-6	1 - 5
AMORPHOUS SILICA	7631-86-9	1 - 5
ALUMINUM OXIDES	1344-28-1	1 - 5

4. FIRST AID MEASURES

Eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes.
Skin contact:	Wash off immediately with soap and plenty of water.
Ingestion:	If swallowed, do not induce vomiting. Get medical attention immediately.
Inhalation:	Move to fresh air. Oxygen or artificial respiration if needed.

5. FIRE-FIGHTING MEASURES

Flammable properties	No information available
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO ₂) - Foam - Dry chemical
Hazardous decomposition products	Oxides of carbon, hydrocarbons. Aldehydes. Ketones. Silicon.
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.
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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
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.
Other information	Not applicable

7. HANDLING AND STORAGE

Handling

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Storage

Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
CRYSTALLINE SILICA (QUARTZ)	: 0.025 mg/m ³ TWA (respirable fraction)	: 0.1 mg/m ³ TWA (respirable dust)	TWA: 0.1 mg/m ³ TWAEV (respirable dust)	TWA: 0.10 mg/m ³ TWA (designated substance regulation, respirable)	: 0.1 mg/m ³ TWA (respirable fraction)
TITANIUM DIOXIDE (TOTAL DUST)	: 10 mg/m ³ TWA	: 10 mg/m ³ TWA (total dust); 15 mg/m ³ TWA (total dust)	TWA: 10 mg/m ³ TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)	TWA: 10 mg/m ³ TWA (total dust)	: 10 mg/m ³ TWA (as Ti); 20 mg/m ³ STEL (as Ti)
ALUMINUM OXIDES	TWA: 1 mg/m ³	: 10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction); 15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	TWA: 10 mg/m ³ TWAEV (total dust, containing no asbestos and less than 1% crystalline silica, as Al)	TWA: 10 mg/m ³	: 10 mg/m ³ TWA

Engineering measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin protection

Lightweight protective clothing, Apron, Impervious gloves

Eye/face protection

Goggles. If splashes are likely to occur, wear face-shield.

Respiratory protection

Use only with adequate ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH 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

Flash point	Not applicable
Boiling range	No information available
Upper explosion limit	No information available
Lower explosion limit	No information available
Evaporation rate	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.55735 g/cm ³
Density	12.95952 lbs/gal
Volatile organic compounds (VOC) content	.082 lbs/gal
Volatile by weight	.6250 %
Volatile by volume	1.1362 %

10. STABILITY AND REACTIVITY

Chemical stability	Stable.	Conditions to avoid	Heat, flames and sparks. Amines. Contact with water liberates toxic gas (methanol).
Incompatible products	Strong oxidizing agents. Bases. Acids. Amines.	Possibility of hazardous reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		
TITANIUM DIOXIDE (TOTAL DUST)	10000 mg/kg (Rat)		
NONYLPHENOL	580 mg/kg (Rat)	2031 mg/kg (Rabbit)	
BENZYL ALCOHOL	1230 mg/kg (Rat)	2000 mg/kg (Rabbit)	8.8 mg/L (Rat) 4 h
AMORPHOUS SILICA	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.2 mg/L (Rat) 1 h
ALUMINUM OXIDES	5000 mg/kg (Rat)		

Irritation	No information available
Corrosivity	No information available
Sensitization	No information available

Chronic toxicity

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

Component	ACGIH	IARC	NTP	OSHA	Mexico
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	
TITANIUM DIOXIDE (TOTAL DUST)		Group 2B		X	

Mutagenicity	No information available
Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available
Target Organ Effects	Eyes, Lungs, Respiratory system, Skin.
Endocrine Disruptor Information	No information available

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
EPOXY RESIN (LER)	Group III Chemical		
NONYLPHENOL	Group II Chemical	Medium Exposure Concern	

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
NONYLPHENOL	EC50 0.36 - 0.48 mg/L 96 h EC50 0.16 - 0.72 mg/L 72 h EC50 = 1.3 mg/L 72 h	LC50= 0.135 mg/L Pimephales promelas 96 h LC50= 0.1351 mg/L Lepomis macrochirus 96 h		EC50 0.0874 - 0.124 mg/L 48 h EC50 0.17 - 0.21 mg/L 48 h EC50 = 0.14 mg/L 48 h
BENZYL ALCOHOL	EC50 = 35 mg/L 3 h	LC50= 10 mg/L Lepomis macrochirus 96 h LC50= 460 mg/L Pimephales promelas 96 h	EC50 = 63.7 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 71.4 mg/L 30 min EC50 = 50 mg/L 5 min	EC50 = 23 mg/L 48 h
AMORPHOUS SILICA	EC50 = 440 mg/L 72 h	LC50= 5000 mg/L Brachydanio rerio 96 h		EC50 = 7600 mg/L 48 h

13. DISPOSAL CONSIDERATIONS

Waste 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 for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

DOT	Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.
Proper shipping name	PAINT IN OIL

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Does not Comply
CHINA	Complies
ENCS	Does not Comply
KECL	Complies
PICCS	Complies
AICS	Complies

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

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
ALUMINUM OXIDES	1344-28-1	1 - 5	1.0 % de minimis concentration (fibrous forms)

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	yes
Acute Health Hazard	yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

CERCLA**United States of America State Regulations****California Prop. 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X
TITANIUM DIOXIDE (TOTAL DUST)	X	X	X		X
NONYLPHENOL	X		X		
BENZYL ALCOHOL	X		X		
AMORPHOUS SILICA	X		X		
ALUMINUM OXIDES	X	X	X		X

Other international regulations**Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

WHMIS Classification

D2B Toxic materials

E Corrosive material



Component	NPRI
NONYLPHENOL	Part 1, Group 1 Substance
ALUMINUM OXIDES	Part 1, Group 1 Substance (fibrous form)

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Revision Date 06-May-2011

Revision Note No information available

HMIS (Hazardous Material Information System)

Health 2

Flammability 1

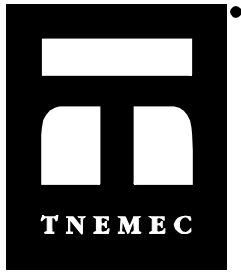
Reactivity 0

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 or 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 MSDS



Material Safety Data Sheet

Print Date 28-Sep-2011

Revision Date 28-Sep-2011

Revision Number 5

1. PRODUCT AND COMPANY IDENTIFICATION

Common name	SERIES S280 PART B
Product code	S280-0280B
Trade name	TNEME-GLAZE CONVERTER
Product Class	MODIFIED POLYAMINE EPOXY PAINT
Manufacturer	Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
Emergency telephone	800-535-5053 (INFOTRAC) - TNEMEC REGULATORY DEPT: 816-474-3400

2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

CAUSES SKIN AND EYE BURNS.
HARMFUL OR FATAL IF SWALLOWED.
HARMFUL IF INHALED.
MAY CAUSE ALLERGIC SKIN REACTION; EFFECTS MAY BE PERMANENT.
MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.

Potential health effects

Principle Routes of Exposure Eye contact, Inhalation, Skin contact.

Acute effects

Eyes	Causes burns.
Skin	Causes burns. May cause sensitization by skin contact.
Inhalation	Irritating to respiratory system. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs.
Ingestion	May be harmful if swallowed.

Chronic effects

Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends on duration and level of exposure).

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Skin disorders. Respiratory disorders.

Interactive effects Use of alcoholic beverages may enhance toxic effects.

Potential environmental effects See Section 12 for additional Ecological Information

Target Organ Effects Eyes, Lungs, Respiratory system, Skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
BENZYL ALCOHOL	100-51-6	30 - 60
MODIFIED CYCLOALIPHATIC POLYAMINE		10 - 30
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	10 - 30
POLYOXYPROPYLENETRIAMINE	39423-51-3	10 - 30

4. FIRST AID MEASURES

Eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes.
Skin contact:	Wash off immediately with soap and plenty of water.
Ingestion:	If swallowed, do not induce vomiting. Get medical attention immediately.
Inhalation:	Move to fresh air. Oxygen or artificial respiration if needed.

5. FIRE-FIGHTING MEASURES

Flammable properties	No information available
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Contact with water may cause violent frothing. Use: Carbon dioxide (CO ₂) - Foam - Dry chemical
Hazardous decomposition products	Oxides of carbon, hydrocarbons. Aldehydes. Ketones. Silicon. Oxides of nitrogen. Ammonia. Nitric acid, nitrosamine. Phenolics.
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.
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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
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.
Other information	Not applicable

7. HANDLING AND STORAGE

Handling

Close container after each use. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. If splashes are likely to occur, wear goggles. Wear protective gloves/clothing. Do not burn, or use a cutting torch on, the empty drum. When used in a mixture, read the labels and safety data sheets of all components. Wash thoroughly after handling.

Storage

Prevent build-up of vapors by opening all windows and doors to achieve cross ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
CRYSTALLINE SILICA (QUARTZ)	: 0.025 mg/m ³ TWA (respirable fraction)	: 0.1 mg/m ³ TWA (respirable dust)	TWA: 0.1 mg/m ³ TWAEV (respirable dust)	TWA: 0.10 mg/m ³ TWA (designated substance regulation, respirable)	: 0.1 mg/m ³ TWA (respirable fraction)

Engineering measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment**Skin protection**

Lightweight protective clothing, Apron, Impervious gloves

Eye/face protection

Goggles. If splashes are likely to occur, wear face-shield.

Respiratory protection

Use only with adequate ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH 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

Flash point	Not applicable
Boiling range	No information available
Upper explosion limit	No information available
Lower explosion limit	No information available
Evaporation rate	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	1.17256 g/cm ³
Density	9.75747 lbs/gal
Volatile organic compounds (VOC) content	.402 lbs/gal
Volatile by weight	4.1240 %
Volatile by volume	4.7942 %

10. STABILITY AND REACTIVITY

Chemical stability	Stable.	Conditions to avoid	Heat, flames and sparks. Amines. Contact with water liberates toxic gas (methanol). Epoxy constituents.
Incompatible products	Strong oxidizing agents. Bases. Acids. Amines. Hypochlorites. Nitrous acid and other nitrosating agents. Peroxides.	Possibility of hazardous reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
BENZYL ALCOHOL	1230 mg/kg (Rat)	2000 mg/kg (Rabbit)	8.8 mg/L (Rat) 4 h
MODIFIED CYCLOALIPHATIC POLYAMINE	1000 mg/kg (Rat)		
CRYSTALLINE SILICA (QUARTZ)	500 mg/kg (Rat)		

Irritation	No information available
Corrosivity	No information available
Sensitization	No information available

Chronic toxicity

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

Component	ACGIH	IARC	NTP	OSHA	Mexico
CRYSTALLINE SILICA (QUARTZ)	A2	Group 1	Known	X	

Mutagenicity	No information available
Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available
Target Organ Effects	Eyes, Lungs, Respiratory system, Skin.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
BENZYL ALCOHOL	EC50 = 35 mg/L 3 h	LC50= 460 mg/L Pimephales promelas 96 h LC50= 10 mg/L Lepomis macrochirus 96 h	EC50 = 63.7 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 71.4 mg/L 30 min EC50 = 50 mg/L 5 min	EC50 = 23 mg/L 48 h
MODIFIED CYCLOALIPHATIC POLYAMINE		LC50 46 - 100 mg/L Leuciscus idus 96 h		

13. DISPOSAL CONSIDERATIONS

Waste 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 for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

14. TRANSPORT INFORMATION

DOT Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.

Proper shipping name PAINT IN OIL

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
CHINA	Complies
ENCS	Complies
KECL	Does not Comply
PICCS	Does not Comply
AICS	Complies

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

SARA 313**SARA 311/312 Hazardous Categorization**

Chronic Health Hazard	yes
Acute Health Hazard	yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

CERCLA**United States of America State Regulations****California Prop. 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
BENZYL ALCOHOL	X		X		
CRYSTALLINE SILICA (QUARTZ)	X	X	X		X

Other international regulations**Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

WHMIS Classification

D2B Toxic materials
E Corrosive material



Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Revision Date 28-Sep-2011

Revision Note No information available

HMIS (Hazardous Material Information System) **Health** 3* **Flammability** 1 **Reactivity** 1

Disclaimer

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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 MSDS



Material Safety Data Sheet

Print Date 29-Jun-2011

Revision Date 29-Jun-2011

Revision Number 4

1. PRODUCT AND COMPANY IDENTIFICATION

Common name SERIES 273 PART C
Product code S273-0273C
Trade name STRANLOK ML MAT
Product Class FIBERGLASS MAT

Manufacturer Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372
Emergency telephone 800-535-5053 (INFOTRAC) - TNE MEC REGULATORY DEPT: 816-474-3400

2. HAZARDS IDENTIFICATION

Emergency Overview

WARNING!

HARMFUL BY INHALATION.
MAY CAUSE EYE, SKIN, NOSE, THROAT AND RESPIRATORY TRACT IRRITATION.

Potential health effects

Principle Routes of Exposure Eye contact, Inhalation, Skin contact.

Acute effects

Eyes May cause slight irritation.
Skin Irritating to skin.
Inhalation Irritating to respiratory system.
Ingestion May be harmful if swallowed.

Chronic effects

Avoid repeated exposure.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions Skin disorders. Central nervous system. Respiratory disorders. Kidney disorders. Liver disorders.

Interactive effects Not applicable. Use of alcoholic beverages may enhance toxic effects.

Potential environmental effects See Section 12 for additional Ecological Information

Target Organ Effects Eyes, Nasal Cavities, Respiratory system, Skin, Blood, Central nervous system, Central Vascular System (CVS), Kidney, Liver, Lungs, Prostate

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

Component	CAS-No	Weight %
FIBROUS GLASS	65997-17-3	60 - 100

3. COMPOSITION/INFORMATION ON INGREDIENTS

UREA RESIN	9011-05-6	10 - 30
CALCIUM CARBONATE	471-34-1	10 - 30

4. FIRST AID MEASURES

Eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes.
Skin contact:	Wash off immediately with soap and plenty of water.
Ingestion:	If swallowed, do not induce vomiting. Get medical attention immediately.
Inhalation:	Move to fresh air. Oxygen or artificial respiration if needed.

5. FIRE-FIGHTING MEASURES

Flammable properties	Combustible material.
Suitable extinguishing media	Foam, carbon dioxide, and dry chemical.
Hazardous decomposition products	Carbon monoxide. Carbon dioxide (CO ₂). Oxides of nitrogen.
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.
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	Avoid contact with skin, eyes and clothing. Use personal protective equipment.
Environmental precautions	Prevent further leakage or spillage if safe to do so. No special environmental precautions required.
Methods for cleaning up	Clean up promptly by scoop or vacuum.
Other information	Not applicable

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Tightly fitting safety goggles. Wear protective gloves/clothing. Wash thoroughly after handling.
Storage	Keep in a dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	Quebec TWAEV	Ontario TWAEV	Mexico OEL (TWA)
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FIBROUS GLASS	: 1 fiber/cm ³ TWA (respirable fibers: length >5 μm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers); 5 mg/m ³ TWA (inhalable fraction, listed under Synthetic vitreous fibers)	Ceiling: 5 mg/m ³	TWA: 10 mg/m ³ TWAEV (total dust, respirable, containing no asbestos and less than 1% crystalline silica, listed under Fibres - Artificial vitreous mineral fibres)	TWA: 1 fibre/cm ³ TWA (length>5 microns, aspect ratio>= 3.1, respirable); 5 mg/m ³ TWA (inhalable)	TWA: 0.15 mg/m ³ TWA: 0.5 mg/m ³ TWA: 0.1 mg/m ³ TWA: 0.2 mg/m ³ TWA: 5 mg/m ³ TWA: 0.01 mg/m ³ TWA: 0.002 mg/m ³ STEL: 10 mg/m ³
CALCIUM CARBONATE			TWA: 10 mg/m ³ TWAEV (total dust) TWA: 10 mg/m ³ TWAEV (Limestone, total dust, containing no Asbestos and <1% Crystalline silica)	TWA: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³

Engineering measures

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Skin protection

Lightweight protective clothing, Apron, Impervious gloves

Eye/face protection

If splashes are likely to occur, wear Goggles.

Respiratory protection

Use only with adequate ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH 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

Flash point	Not applicable
Boiling range	No information available
Upper explosion limit	Not Applicable
Lower explosion limit	Not Applicable
Evaporation rate	No information available
Vapor pressure	Not Applicable
Vapor density	Not Applicable
Specific Gravity	0.902 g/cm ³
Density	7.51 lbs/gal
Volatile organic compounds (VOC) content	0.0 lbs/gal
Volatile by weight	0.0 %
Volatile by volume	0.0 %

10. STABILITY AND REACTIVITY

Chemical stability	Stable.	Conditions to avoid	Heat, flames and sparks
Incompatible products	No materials to be especially mentioned. Strong oxidizing agents. Acids. Reducing agents.	Possibility of hazardous reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
UREA RESIN	8394 mg/kg (Rat)	>2100 mg/kg (Rat)	>167 mg/m ³ (Rat) 4 h
CALCIUM CARBONATE	6450 mg/kg (Rat)		

Irritation	No information available
Corrosivity	No information available
Sensitization	No information available

Chronic toxicity

Carcinogenicity

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

Component	ACGIH	IARC	NTP	OSHA	Mexico
FIBROUS GLASS		Group 1 Group 2A			

Mutagenicity	No information available
Reproductive effects	No information available
Developmental effects	No information available
Teratogenicity	No information available
Target Organ Effects	Eyes, Nasal Cavities, Respiratory system, Skin, Blood, Central nervous system, Central Vascular System (CVS), Kidney, Liver, Lungs, Prostate.
Endocrine Disruptor Information	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia
FIBROUS GLASS		LC50 5.6 - 7.4 µg/L Pimephales promelas 96 h LC50 9.4 - 9.7 µg/L Pimephales promelas 96 h LC50 24.2 - 48.4 µg/L Lepomis macrochirus 96 h		EC50 = 0.9 µg/L 48 h LC50 = 5 µg/L 96 h LC50 1.4 - 2.3 µg/L 96 h

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	Dispose of in accordance with local regulations.
Contaminated packaging	No information available.

14. TRANSPORT INFORMATION

DOT	Ground Transportation Only. Call TNEMEC Traffic Department - 816-474-3400 for other modes of Transportation.
Proper shipping name	NOT REGULATED

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not Comply
CHINA	Complies
ENCS	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

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

SARA 313**SARA 311/312 Hazardous Categorization**

Chronic Health Hazard	yes
Acute Health Hazard	yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
FIBROUS GLASS		X		

CERCLA**United States of America State Regulations****California Prop. 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65
FIBROUS GLASS	65997-17-3	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
FIBROUS GLASS	X	X	X	X	X
CALCIUM CARBONATE	X	X	X		X

Other international regulations**Canada**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

WHMIS Classification

Non-controlled

