

Safety Data Sheet

Issue Date 22-Sep-2015 Revision Date 22-Sep-2015 Revision Number 14

1. IDENTIFICATION

Product identifier

Product Code S239-0000A

Product Name CHEMTREAD CLEAR

Other means of identification

Common Name SERIES 239, 239SC OR 286, PART A

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 Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 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 1
Skin sensitization	Category 1A
Reproductive Toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Corrosive to Metals	Category 1

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes skin irritation

Causes serious eye damage

May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure

May be corrosive to metals



Appearance clear Physical state liquid Odor Slight

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

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

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

Do not eat, drink or smoke when using this product

Keep only in original container

Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

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

Absorb spillage to prevent material damage

Storage

Store locked up

Store in corrosive resistant/metal/plastic container with a resistant inner liner

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful in contact with skin
Toxic to aquatic life with long lasting effects

SEE SAFETY DATA SHEET Acute Toxicity

0.0487 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
EPOXY RESIN	28064-14-4	60 - 100%
BENZYL ALCOHOL	100-51-6	1 - 10%
NONYLPHENOL	84852-15-3	1 - 10%
GAMMA-GLYCIDOXYPROPYLTRIMETHOXYSILA	2530-83-8	0.1 - 1%
NE		
DEFOAMER	63148-62-9	0.1 - 1%
POLY(DIMETHYLSILOXANE)	70914-12-4	0 - 0.1%
AMORPHOUS SILICA	7631-86-9	0 - 0.1%
TOLUENE	108-88-3	0 - 0.1%

METHYL ALCOHOL	-	0 - 0.1%
POLYETHYLENE GLYCOL MONOALLYL ETHER ACETATE	27252-87-5	0 - 0.1%
PROPIETARY SILOXANE	-	0 - 0.1%
POLYETHYLENE GLYCOL DIACETATE	27252-83-1	0 - 0.1%

^{*}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

symptoms persist, call a physician.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide. Dry chemical. Foam. Water spray.

Unsuitable extinguishing media No information available.

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 dioxide. Aldehydes.

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, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

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.

If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated Methods for cleaning up

absorbent, container and unused contents in accordance with local, state and federal

regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Close container after each use. Avoid contact with eyes, skin 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.

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 Incompatible with oxidizing agents. Alkalis. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
AMORPHOUS SILICA 7631-86-9	-	TWA: 6 mg/m ³	3000 mg/m ³
TOLUENE 108-88-3	TWA: 20 ppm	TWA: 100 ppm TWA: 375 mg/m³ STEL: 150 ppm STEL: 560 mg/m³ TWA: 200 ppm Ceiling: 300 ppm	500 ppm
METHYL ALCOHOL	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³ Skin	6000 ppm

Appropriate engineering controls

Sufficient ventilation, in volume and pattern, should be provided through both local and **Engineering measures**

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.

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

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.

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

Avoid breathing dust created by cutting, sanding, or grinding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liauid

Appearance clear Odor Slight

Odor threshold Color No information available No information available

Remarks **Property** Values

No data available Melting point / freezing point

No data available

Boiling point / boiling range 72 °C / 162 °F

Flash point No information available

No data available **Evaporation rate** Flammability (solid, gas) No information available

Flammability Limit in Air No data available

Upper flammability limit N/A Lower flammability limit N/A

Vapor pressure No data available Vapor density No data available

Specific gravity 1.17457 a/cm3

Water solubility Insoluble in cold water

Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available No data available **Autoignition temperature Decomposition temperature** No data available

Kinematic viscosity No data available

Dynamic viscosity 2600 centipoises

Other Information

Density 9.77417 lbs/gal Volatile organic compounds (VOC) .065 lbs/gal

Total volatiles weight percent .6580 % Total volatiles volume percent .7496 %

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

Incompatible with oxidizing agents, Alkalis, Strong bases

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 dioxide. Carbon monoxide. Aldehydes.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Severely irritating to eyes. May cause irreversible damage to eyes.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
NONYLPHENOL 84852-15-3	= 1300 mg/kg (Rat)	= 2031 mg/kg (Rabbit)	
GAMMA-GLYCIDOXYPROPYLTRI METHOXYSILANE 2530-83-8	= 22600 μL/kg(Rat)	= 3970 μL/kg (Rabbit)	
DEFOAMER 63148-62-9	> 24 g/kg (Rat) > 17 g/kg (Rat)	> 2 g/kg(Rabbit)	
AMORPHOUS SILICA 7631-86-9	> 5000 mg/kg (Rat)	> 2000 mg/kg(Rabbit)	> 2.2 mg/L (Rat)1 h
TOLUENE 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
METHYL ALCOHOL	= 6200 mg/kg (Rat)	= 15800 mg/kg (Rabbit)	= 64000 ppm (Rat) 4 h = 22500 ppm (Rat) 8 h

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin disorders.

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

Corrosivity May be corrosive to metals.

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.

Sensitization May cause sensitization of susceptible persons.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA
AMORPHOUS SILICA 7631-86-9		Group 3		
TOLUENE 108-88-3		Group 3		

Reproductive effects Suspected of damaging fertility or the unborn child.

STOT - single exposure No information available

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects Skin. Eves. respiratory system, liver, kidney.

Aspiration hazard Based on product level data, this product does not meet the requirement to be classified as

an aspiration hazard. However, this product contains an ingredient that may cause

aspiration if swallowed.

Acute Toxicity

0.0487 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0.1875 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
BENZYL ALCOHOL	35: 3 h Anabaena variabilis mg/L	460: 96 h Pimephales promelas	23: 48 h water flea mg/L EC50
100-51-6	EC50	mg/L LC50 static 10: 96 h Lepomis	
110111/1/101		macrochirus mg/L LC50 static	
NONYLPHENOL 84852-15-3	0.36 - 0.48: 96 h Pseudokirchneriella subcapitata	0.135: 96 h Pimephales promelas mg/L LC50 flow-through 0.1351: 96	0.14: 48 h Daphnia magna mg/L EC50
04032-13-3	mg/L EC50 static 0.16 - 0.72: 72 h	h Lepomis macrochirus mg/L LC50	EC30
	Pseudokirchneriella subcapitata	flow-through	
	mg/L EC50 static 1.3: 72 h		
	Desmodesmus subspicatus mg/L		
	EC50		
AMORPHOUS SILICA	440: 72 h Pseudokirchneriella	5000: 96 h Brachydanio rerio mg/L	7600: 48 h Ceriodaphnia dubia
7631-86-9	subcapitata mg/L EC50	LC50 static	mg/L EC50
TOLUENE	433: 96 h Pseudokirchneriella	15.22 - 19.05: 96 h Pimephales	5.46 - 9.83: 48 h Daphnia magna
108-88-3	subcapitata mg/L EC50 12.5: 72 h	promelas mg/L LC50 flow-through	mg/L EC50 Static 11.5: 48 h
	Pseudokirchneriella subcapitata	12.6: 96 h Pimephales promelas	Daphnia magna mg/L EC50
	mg/L EC50 static	mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50	
		flow-through 14.1 - 17.16: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		static 5.8: 96 h Oncorhynchus	
		mykiss mg/L LC50 semi-static 11.0 -	
		15.0: 96 h Lepomis macrochirus	
		mg/L LC50 static 54: 96 h Oryzias	
		latipes mg/L LC50 static 28.2: 96 h	
		Poecilia reticulata mg/L LC50 semi-static 50.87 - 70.34: 96 h	
		Poecilia reticulata mg/L LC50 static	
METHYL ALCOHOL		28200: 96 h Pimephales promelas	
		mg/L LC50 flow-through 100: 96 h	
		Pimephales promelas mg/L LC50	
		static 19500 - 20700: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		flow-through 18 - 20: 96 h	
		Oncorhynchus mykiss mL/L LC50 static 13500 - 17600: 96 h Lepomis	
		macrochirus mg/L LC50	
		flow-through	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
BENZYL ALCOHOL	1.1
100-51-6	
NONYLPHENOL	5.4
84852-15-3	
TOLUENE	2.65
108-88-3	
METHYL ALCOHOL	-0.77

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.

Component	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
TOLUENE	U220	Included in waste streams:		U220
108-88-3		F005, F024, F025, F039,		
		K015, K036, K037, K149,		
		K151		
METHYL ALCOHOL		Included in waste stream:		U154
		F039		

Component	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
TOLUENE			Toxic waste	
108-88-3			waste number F025	
			Waste description:	
			Condensed light ends, spent	
			filters and filter aids, and	
			spent desiccant wastes from	
			the production of certain	
			chlorinated aliphatic	
			hydrocarbons, by free	
			radical catalyzed processes.	
			These chlorinated aliphatic	
			hydrocarbons are those	
			having carbon chain lengths	
			ranging from one to and	
			including five, with varying	
			amounts and positions of	
			chlorine substitution.	

Component	CAWAST
TOLUENE	Toxic
108-88-3	Ignitable
METHYL ALCOHOL	Toxic
	Ignitable

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name paint in oil Not regulated

<u>IATA</u>

Proper Shipping Name Not regulated

Additional information Call TNEMEC 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

S239-0000A CHEMTREAD CLEAR

ENCS Does not comply
IECSC Complies
KECL Complies

PICCS Complies
AICS Does not comply

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

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

Component HAPS Data

TOLUENE

METHYL ALCOHOL

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.

Component	SARA 313 - Threshold Values
NONYLPHENOL - 84852-15-3	1.0
TOLUENE - 108-88-3	1.0
METHYL ALCOHOL -	1.0

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes
Chronic 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
TOLUENE 108-88-3	1000 lb	X	X	Х

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
TOLUENE	1000 lb 1 lb		RQ 1000 lb final RQ
108-88-3			RQ 454 kg final RQ RQ 1 lb final
			RQ
			RQ 0.454 kg final RQ
METHYL ALCOHOL	5000 lb		RQ 5000 lb final RQ
			RQ 2270 kg final RQ

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

Component	California Prop. 65
TOLUENE - 108-88-3	Developmental
METHYL ALCOHOL -	Developmental

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
BENZYL ALCOHOL		X	X
100-51-6			
AMORPHOUS SILICA	X	X	X
7631-86-9			
TOLUENE	X	X	X
108-88-3			
METHYL ALCOHOL	X	X	X

16. OTHER INFORMATION

NFPA HMIS (Hazardous Health 3*

Flammability 0 Flammability 0 Instability 1 Reactivity 1 Physical hazard *

Material Information

System)

Prepared By Revision Date Revision Summary 9 4 5 7 10 8 11 14 15 1 Tnemec Regulatory Dept: 816-474-3400

22-Sep-2015

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 28-Jul-2015 Revision Date 28-Jul-2015 Revision Number 10

1. IDENTIFICATION

Product identifier

Product Code S239-0286B

Product Name S239/S286 CONVERTER

Other means of identification

Common Name SERIES 239/286, PART B

UN/ID no. 3066

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 Distributor

Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203

64120-1372 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)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1A
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 2
Specific target organ toxicity (repeated exposure)	Category 1
Corrosive to Metals	Category 1

Label elements

EMERGENCY OVERVIEW

Danger			

Hazard statements

Harmful if swallowed

Harmful if inhaled

Causes severe skin burns and eye damage

May cause an allergic skin reaction

Suspected of damaging fertility or the unborn child

May cause damage to organs

Causes damage to organs through prolonged or repeated exposure

May be corrosive to metals



Appearance amber

Physical state liquid

Odor amine

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

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

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Keep only in original container

Response

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

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

Wash contaminated clothing before reuse

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

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

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

Immediately call a POISON CENTER or doctor/physician

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

Rinse mouth

Do NOT induce vomiting

Absorb spillage to prevent material damage

Storage

Store locked up

Store in corrosive resistant/metal/plastic container with a resistant inner liner

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

May be harmful in contact with skin

Toxic to aquatic life with long lasting effects

Acute Toxicity 39.40108 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
BENZYL ALCOHOL	100-51-6	10 - 30%
MODIFIED ALIPHATIC AMINE	-	10 - 30%
POLYOXYPROPYLENETRIAMINE	39423-51-3	10 - 30%
MODIFIED CYCLOALIPHATIC POLYAMINE	1761-71-3	10 - 30%
MODIFIED CYCLOALIPHATIC POLYAMINE	-	1 - 10%
NONYLPHENOL	84852-15-3	1 - 10%

^{*}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

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aiderUse 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. Dry powder. Dry chemical. alcohol-resistant foam.

Unsuitable extinguishing media No information available.

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 dioxide. Hydrocarbons. Aldehydes. Nitrogen oxides (NOx). Ammonia.

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, protective equipment and emergency procedures

Revision Date 28-Jul-2015

Personal precautions Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

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 containmentRemove 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 Close container after each use. Avoid contact with eyes, skin 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.

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 Incompatible with oxidizing agents. Hydroxyl Compounds. Acids. sodium hypochlorite. Zinc.

copper.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure 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

face-shield.

Skin and body protectionWear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

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Respiratory protectionUse 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

AppearanceamberOdoramine

Color No information available **Odor threshold** No information available

<u>Property</u> <u>Values</u> <u>Remarks</u>

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 N/A Lower flammability limit N/A

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 1.02672 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data available

Kinematic viscosity

Dynamic viscosity

704 centipoises

Other Information

Density 8.54389 lbs/gal Volatile organic compounds (VOC) .232 lbs/gal

content

Total volatiles weight percent 2.7140 % Total volatiles volume percent 2.6649 %

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

Incompatible with oxidizing agents, Hydroxyl Compounds, Acids, sodium hypochlorite, Zinc, copper

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 dioxide. Hydrocarbons. Ammonia. Aldehydes. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation May cause central nervous system depression with nausea, headache, dizziness, vomiting,

and incoordination.

Eye contact Severely irritating to eyes. May cause irreversible damage to eyes.

Skin contactContact causes severe skin irritation and possible burns. May cause sensitization by skin

contact.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
MODIFIED CYCLOALIPHATIC POLYAMINE 1761-71-3	= 1000 mg/kg (Rat)		
NONYLPHENOL 84852-15-3	= 580 mg/kg (Rat)	= 2031 mg/kg (Rabbit)	

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Skin disorders.

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

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.

Sensitization May cause sensitization of susceptible persons.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects Suspected of damaging fertility or the unborn child.

STOT - single exposure Skin, Eyes, Central Nervous System (CNS)

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure, liver, kidney,

Respiratory system, Central Nervous System (CNS)

Aspiration hazard No information available.

Acute Toxicity 39.40108 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

39.40108 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

COLLEGE TO THE THE COLLEGE COLLEGE			5.1.
Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
BENZYL ALCOHOL	35: 3 h Anabaena variabilis mg/L	10: 96 h Lepomis macrochirus mg/L	23: 48 h water flea mg/L EC50
100-51-6	EC50	LC50 static 460: 96 h Pimephales	
		promelas mg/L LC50 static	

MODIFIED CYCLOALIPHATIC POLYAMINE 1761-71-3		46 - 100: 96 h Leuciscus idus mg/L LC50 static	
NONYLPHENOL 84852-15-3	0.36 - 0.48: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 1.3: 72 h Desmodesmus subspicatus mg/L EC50 0.16 - 0.72: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	0.135: 96 h Pimephales promelas mg/L LC50 flow-through 0.1351: 96 h Lepomis macrochirus mg/L LC50 flow-through	0.14: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
BENZYL ALCOHOL 100-51-6	1.1
MODIFIED CYCLOALIPHATIC POLYAMINE 1761-71-3	2.03
NONYLPHENOL 84852-15-3	5.4

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.

14. TRANSPORT INFORMATION

DOT

UN/ID no. 3066
Proper Shipping Name paint
Hazard Class 8
Packing Group III
Emergency Response Guide 153

Number

<u>IATA</u>

UN/ID no. 3066
Proper Shipping Name paint
Hazard Class 8
Packing Group III
ERG Code 856

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

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

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.

Component	SARA 313 - Threshold Values
NONYLPHENOL - 84852-15-3	1.0

SARA 311/312 Hazardous

Categorization

Acute Health HazardYesChronic Health HazardYesFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

CERCLA

United States of America

California Prop. 65

This product does not contain any Proposition 65 chemicals

California SCAQMD Rule 443

Contains Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
BENZYL ALCOHOL		X	Χ
100-51-6			

16. OTHER INFORMATION

NFPA Health 3 Flammability 1 Instability 1 Physical hazard *

Revision Date 28-Jul-2015

HMIS (Hazardous Material Information

Health 3*

Flammability 1

Reactivity 1

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 28-Jul-2015

Revision Summary 9 4 5 7 10 8 11 14 15 1

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 MSDS

TNEMEC

Safety Data Sheet

Issue Date No data available Revision Date 27-Jan-2015 Revision Number 4

1. IDENTIFICATION

Product identifier

Product Code S211-0214

Product Name FUMED SILICA S C MORTAR

Other means of identification

Common Name SERIES 211-214

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

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)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed

Harmful if inhaled

Causes serious eye irritation

May cause cancer

Causes damage to organs

Causes damage to organs through prolonged or repeated exposure



Appearance light grey Physical state powder Odor odorless

Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

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

Response

IF exposed: Call a POISON CENTER or doctor/physician

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

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

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

Rinse mouth

Storage

Store locked up

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

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

Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs

SEE SAFETY DATA SHEET

Acute Toxicity

0.000102 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	30 - 60%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	30 - 60%
COAL FIRED FLY ASH BI-PRODUCT	68131-74-8	1 - 10%

^{*}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

symptoms persist, call a physician.

Revision Date 27-Jan-2015

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician.

Inhalation Remove to fresh air. Oxygen or artificial respiration if needed.

Ingestion If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the first aiderUse 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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

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.

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 Avoid contact with eyes, skin and clothing. Use personal protective equipment. Remove all

sources of ignition.

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 Shovel or sweep up.

7. HANDLING AND STORAGE

Precautions for safe handling

Revision Date 27-Jan-2015

Handling Close container after each use. Avoid contact with eyes, skin and clothing. Do not eat, drink

or smoke when using this product. Tightly fitting safety goggles. Wear protective gloves/clothing. When used in a mixture, read the labels and safety data sheets of all

components. 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 Incompatible with oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	50 mg/m ³
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	50 mg/m ³
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8	TWA: 1 mg/m³	-	100 mg/m³ 10 mg/m³

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.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protectionUse 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 powder

Appearancelight greyOdorodorless

Color No information available Odor threshold No information available

PropertyValuesRemarkspHNo data available

Melting point / freezing point No data available

Boiling point / boiling range 72 °C / 162 °F

Flash point No information available

S211-0214 FUMED SILICA S C MORTAR

Evaporation rateNo data availableFlammability (solid, gas)Not applicableFlammability Limit in AirNo data available

Upper flammability limit N/A Lower flammability limit N/A

Vapor pressureNo data availableVapor densityNo data available

Specific gravity 2.34955 g/cm3

Water solubility Insoluble in cold water

Solubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition temperatureNo data availableDecomposition temperatureNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Other Information

Density 19.59523 lbs/gal

Volatile organic compounds (VOC) 0 lbs/gal

content

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

Incompatible with 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. Carbon dioxide (CO2). Hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation Harmful if inhaled. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis

(scarring) of the lungs.

Eye contact Severely irritating to eyes.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
CRYSTALLINE SILICA (QUARTZ)	= 500 mg/kg (Rat)		
14808-60-7			

CRYSTALLINE SILICA (QUARTZ) 14808-60-7	= 500 mg/kg (Rat)	
COAL FIRED FLY ASH	> 2000 mg/kg (Rat)	
BI-PRODUCT		
68131-74-8		

Information on toxicological effects

Symptoms Respiratory disorders. Eye Damage.

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

Chronic Toxicity Cancer hazard. Contains crystalline silica which can cause cancer. (Risk of cancer depends

on duration and level of exposure).

SensitizationNo information available.MutagenicityNo information available.

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

Component	ACGIH	IARC	NTP	OSHA
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	Х
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8		Group 1	Known	

Reproductive effectsSTOT - single exposure
No information available.
Eyes, Respiratory system

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure

Target organ effects blood, Central nervous system, Central Vascular System (CVS), Eyes, kidney, liver, Lungs,

Nasal Cavities, prostate, respiratory system, Skin.

Aspiration hazard Not applicable.

Acute Toxicity 0.000102 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

98.08407 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
COAL FIRED FLY ASH			140 - 2000: 24 h Daphnia magna
BI-PRODUCT			mg/L EC50
68131-74-8			

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 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.

Component	CAWAST
COAL FIRED FLY ASH BI-PRODUCT	Toxic
68131-74-8	Corrosive

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name SILICA, N.O.I.-20-P.C.F., GREATER (ITEM 176370, SUB 3)

<u>IATA</u>

Proper Shipping Name Not regulated

Additional information Call TNEMEC Traffic Department - 816-474-3400 for additional information or other modes

of Transportation.

15. REGULATORY INFORMATION

International Inventories

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

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

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

Component HAPS Data

COAL FIRED FLY ASH BI-PRODUCT

United States of America

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:

Component	SARA 313 - Threshold Values
COAL FIRED FLY ASH BI-PRODUCT - 68131-74-8	1.0 0.1

SARA 311/312 Hazardous

Categorization

Acute Health Hazard Yes

Chronic Health HazardYesFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8		X		

CERCLA

United States of America

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer

Component	California Prop. 65
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen
COAL FIRED FLY ASH BI-PRODUCT - 68131-74-8	Carcinogen

California SCAQMD Rule 443

Does Not Contain Photochemically Reactive Solvent

State Right-to-Know

Component	New Jersey	Massachusetts	Pennsylvania
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	X	X	Х
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	Х	X	Х
COAL FIRED FLY ASH BI-PRODUCT 68131-74-8	Х		Х

16. OTHER INFORMATION

NFPA Health 1 Flammability 0 Instability 0 Physical hazard *
HMIS (Hazardous Health 1* Flammability 0 Reactivity 0

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 27-Jan-2015

Revision Summary 9 4 5 7 10 8 11 14

Disclaimer

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End of MSDS