

Safety Data Sheet

Issue Date No data available Revision Date 06-Apr-2015 Revision Number 4

1. IDENTIFICATION

Product identifier

Product Code F218-0218A

Product Name MORTARCLAD CLEAR

Other means of identification

Common Name SERIES 218 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

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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

EMERGENCY OVERVIEW

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Appearance yellow white Physical state liquid Odor Slight

Precautionary Statements

Response

Get medical advice/attention if you feel unwell

Storage

Keep away from children

Hazards not otherwise classified (HNOC)

May cause skin and eye irritation May be harmful if swallowed

Other information

Acute Toxicity 32.4745 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
EPOXY RESIN	-	30 - 60%
1-METHOXY-2-PROPANOL	-	1 - 10%
BENZYL ALCOHOL	100-51-6	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.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2). Foam. Dry chemical.

Unsuitable extinguishing media Water.

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. Nitrogen oxides (NOx).

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.

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 Strong oxidizing agents. Acids. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
1-METHOXY-2-PROPANOL	TWA: 50 ppm STEL: 100 ppm	TWA: 100 ppm TWA: 360 mg/m³ STEL: 150 ppm STEL: 540 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 Safety glasses with side-shields

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 liquid

Appearanceyellow whiteOdorSlight

Color No information available Odor threshold No information available

Property Values Remarks

pH No data available

Melting point / freezing point

No data available

Boiling point / boiling range 100 °C / 212.0 °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 1.6

Vapor pressure

No data available

Vapor densityNo data availableSpecific gravity1.05840g/cm3

Water solubility Insoluble in cold water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

Autoignition temperature

Decomposition temperature

No data available

Other Information

Density 8.80744 lbs/gal Volatile organic compounds (VOC) 1.139 lbs/gal

content

Total volatiles weight percent65.9040 %Total volatiles volume percent70.0749 %

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, Acids, 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 oxides. Nitrogen oxides (NOx). Hydrocarbons.

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 Irritating to eyes.

Skin contact Irritating to skin.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-METHOXY-2-PROPANOL	= 5000 mg/kg (Rat)	= 13 g/kg (Rabbit)	> 6 mg/L (Rat) 4 h
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg(Rabbit)	= 8.8 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness,

cessation of breathing.

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 No information available.

Mutagenicity No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available
No information available
No information available

Acute Toxicity 32.4745 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

32.0092 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

	Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
Γ	1-METHOXY-2-PROPANOL		20.8: 96 h Pimephales promelas g/L	23300: 48 h Daphnia magna mg/L
			LC50 static 4600 - 10000: 96 h	EC50
L			Leuciscus idus mg/L LC50 static	
Ī	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	_
L			promelas mg/L LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in Environmental Media

Component	log Pow
1-METHOXY-2-PROPANOL	-0.437

BENZYL ALCOHOL 1.1 100-51-6

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

Proper Shipping Name paint, water base freezable

<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

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

Component	New Jersey	Massachusetts	Pennsylvania
1-METHOXY-2-PROPANOL	X	X	X
BENZYL ALCOHOL 100-51-6		X	X

16. OTHER INFORMATION

NFPA Health 2 Flammability 1 Instability 1 Physical hazard -

HMIS (Hazardous Health 2 Flammability 1 Reactivity 1

Material Information

System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 06-Apr-2015

Revision Summary 9 4 5 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 quarantee that these are the only hazards which exist.

End of MSDS

TNEMEC

Safety Data Sheet

Issue Date No data available Revision Date 09-Apr-2015 Revision Number 6

1. IDENTIFICATION

Product identifier

Product Code F218-0218B

Product Name MORTARCLAD CLEAR

Other means of identification

Common Name SERIES 218 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

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)

Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Corrosive to Metals	Category 1

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes serious eye damage May cause an allergic skin reaction Causes damage to organs May be corrosive to metals



Appearance amber Physical state liquid Odor amine

Precautionary Statements

Prevention

Wear protective gloves/protective clothing/eye protection/face protection Contaminated work clothing should not be allowed out of the workplace Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Keep only in original container

Response

IF exposed: 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: Wash with plenty of soap and water

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

Wash contaminated clothing before reuse 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

Acute Toxicity 27.2788 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
MODIFIED ALIPHATIC AMINE	1477-55-0	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.

Immediate medical attention is required.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. 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 If swallowed, do not induce vomiting. Get medical attention immediately. Never give

anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2). Foam. Dry chemical.

Unsuitable extinguishing media Water.

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. Ammonia. Nitrogen oxides (NOx). Carbon oxides. Nitric acid, nitrosamine.

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.

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

Revision Date 09-Apr-2015

Handling Ensure adequate ventilation. 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. Nitrous acid and other nitrosating agents. Nitrates.

Acids. Peroxides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
MODIFIED ALIPHATIC AMINE	Skin	Skin	
1477-55-0	Ceiling: 0.1 mg/m ³	Ceiling: 0.1 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 protectionUse 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.

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

F218-0218B MORTARCLAD CLEAR

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 1.03418 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

Dynamic viscosity 5900 centipoises

Other Information

Density 8.6251 lbs/gal Volatile organic compounds (VOC) 0 lbs/gal content

Total volatiles weight percent 66.67 % Total volatiles volume percent 69.03 %

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, Nitrous acid and other nitrosating agents, Nitrates, Acids, Peroxides

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. Nitrogen oxides (NOx). Ammonia. Nitric acid, nitrosamine.

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 Causes serious eye damage.

Skin contact Irritating to skin. May cause sensitization by skin contact.

Ingestion Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
MODIFIED ALIPHATIC AMINE	= 660 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 700 ppm (Rat) 1 h
1477-55-0			

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.

Possible risks of irreversible effects. Avoid repeated exposure. Repeated contact may **Chronic Toxicity**

cause allergic reactions in very susceptible persons.

Sensitization May cause sensitization of susceptible persons.

No information available. Mutagenicity

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive effects No information available.

STOT - single exposure May cause disorder and damage to the, Eyes, Skin, Gastrointestinal tract (GI), Respiratory

> system, kidney, liver No information available

STOT - repeated exposure

No information available.

Aspiration hazard

27.2788 % of the mixture consists of ingredient(s) of unknown toxicity. **Acute Toxicity**

12. ECOLOGICAL INFORMATION

Ecotoxicity

27.2788 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

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.

14. TRANSPORT INFORMATION

DOT

UN/ID no. 3066 **Proper Shipping Name** paint **Hazard Class** 8 **Packing Group**

Emergency Response Guide

Number

153, FREEZABLE

<u>IATA</u>

UN/ID no. 3066
Proper Shipping Name paint
Hazard Class 8
Packing Group II
ERG Code 855

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 IECSC** Does not comply **KECL** Complies Complies **PICCS 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

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 Yes
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

Component	New Jersey	Massachusetts	Pennsylvania
MODIFIED ALIPHATIC AMINE	X	X	X
1477-55-0			

16. OTHER INFORMATION

NFPA Health 3 Flammability 0 Instability 1 Physical hazard - HMIS (Hazardous Health 3 Flammability 0 Reactivity 1

HMIS (Hazardous Material Information

Material Information System)

Prepared By Tnemec Regulatory Dept: 816-474-3400

Revision Date 09-Apr-2015

Revision Summary 9 5 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 MSDS

TNEMEC

Safety Data Sheet

Issue Date No data available Revision Date 08-Apr-2015 Revision Number 6

1. IDENTIFICATION

Product identifier

Product Code F218-0218C

Product Name MORTARCLAD AGGREGATE

Other means of identification

Common Name SERIES 218 PART C

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 1
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Harmful if swallowed

Harmful if inhaled

Causes serious eye damage

May cause cancer

May cause respiratory irritation. May cause drowsiness or dizziness Causes damage to organs through prolonged or repeated exposure



Appearance opaque

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

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

Rinse mouth

Storage

Store locked up

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

Keep away from children

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

Harmful to aquatic life with long lasting effects

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

Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible tissue (skin, eye, respiratory tract) damage due to chemical (caustic) burns, including third degree burns SEE SAFETY DATA SHEET

Acute Toxicity

32.41588 % 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%
CALCIUM SILICATES AND ALUMINATES	65997-15-1	10 - 30%
IRON OXIDE FUME	1309-37-1	1 - 10%
GYPSUM	13397-24-5	1 - 10%
MAGNESIUM OXIDE	1309-48-4	1 - 10%
LIMESTONE	1317-65-3	1 - 10%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	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 Show this safety data sheet to the doctor in attendance.

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.

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. Carbon dioxide (CO2). Foam. Dry chemical.

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 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 Shovel or sweep up.

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. 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 away from heat, sparks and flame. Keep container tightly closed.

Incompatible products Acids. Strong 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/m³
CALCIUM SILICATES AND ALUMINATES 65997-15-1	TWA: 1 mg/m³	TWA: 10 mg/m³ TWA: 5 mg/m³ TWA: 15 mg/m³	5000 mg/m ³
IRON OXIDE FUME 1309-37-1	TWA: 5 mg/m³	TWA: 10 mg/m³ TWA: 5 mg/m³ TWA: 15 mg/m³	2500 mg/m ³
GYPSUM 13397-24-5	TWA: 10 mg/m ³	TWA: 15 mg/m³ TWA: 5 mg/m³	
MAGNESIUM OXIDE 1309-48-4	TWA: 10 mg/m ³	TWA: 10 mg/m³ TWA: 15 mg/m³	750 mg/m³
LIMESTONE 1317-65-3	-	TWA: 15 mg/m³ TWA: 5 mg/m³	
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	50 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

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 Tightly fitting safety goggles

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.

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

Appearance opaque Odor odorless

Color No information available Odor threshold No information available

Property Values Remarks

No data available pН

Melting point / freezing point No data available

Boiling point / boiling range No data available

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 pressure No data available Vapor density No data available

Specific gravity 2.8292 a/cm3

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

23.59549 lbs/gal **Density**

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

Acids, 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.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation HARMFUL BY INHALATION. MAY CAUSE DROWSINESS AND DIZZINESS.

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) 14808-60-7	= 500 mg/kg (Rat)		
IRON OXIDE FUME 1309-37-1	> 10000 mg/kg (Rat)		
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	= 500 mg/kg (Rat)		

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

on duration and level of exposure).

SensitizationNo information available. **Mutagenicity**No 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
IRON OXIDE FUME 1309-37-1		Group 3		
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	Х

Reproductive effects No information available.

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

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

Target organ effects Eyes, Lungs, respiratory system, Skin.

Aspiration hazard No information available.

Acute Toxicity 32.41588 % of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

91.19569 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

F218-0218C MORTARCLAD AGGREGATE

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.

California Hazardous Waste Status

This product contains one or more substances that are listed with the State of California as a hazardous waste

Component	CAWAST
CALCIUM SILICATES AND ALUMINATES	Special
65997-15-1	

14. TRANSPORT INFORMATION

DOT

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

IATA

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

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

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

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

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

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	X
CALCIUM SILICATES AND ALUMINATES 65997-15-1	X	Х	X
IRON OXIDE FUME 1309-37-1	Х	X	X
GYPSUM 13397-24-5	Х		Х
MAGNESIUM OXIDE 1309-48-4	Х	X	Х
LIMESTONE 1317-65-3	Х	X	X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	Х	X	X

16. OTHER INFORMATION

Instability 0 Physical hazard * NFPA Health 2 Flammability 0 Health 2* Flammability 0 Reactivity 0 **HMIS (Hazardous**

Material Information

System)

Prepared By Revision Date Revision Summary 9 4 5 7 10 11 14 15

Tnemec Regulatory Dept: 816-474-3400

08-Apr-2015

Disclaimer

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

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End of MSDS