



# Safety Data Sheet

Issue Date 04-Feb-2016

Revision Date 04-Feb-2016

Revision Number 7

## 1. IDENTIFICATION

### Product identifier

**Product Code** F090-0098A  
**Product Name** TNEME-ZINC

### Other means of identification

**Common Name** SERIES 90-98 PART A  
**UN/ID no.** 1263

### 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

**Distributor**  
Tnemec Company, Inc. 86 Boul, des Entreprises, Ste. 203  
Boisbriand, Quebec Canada J7G 2T3

### Emergency telephone number

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

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 2
Flammable Liquids	Category 2


### Label elements

#### EMERGENCY OVERVIEW

#### **Danger**

#### **Hazard statements**

Harmful if swallowed  
Causes skin irritation  
Causes eye irritation  
May cause genetic defects  
May cause cancer  
May cause damage to organs  
Highly flammable liquid and vapor



**Appearance** opaque
**Physical state** liquid
**Odor** aromatic

**Precautionary Statements**

**Prevention**

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Do not breathe dust/fume/gas/mist/vapors/spray
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/mixing/equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge

**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
- If eye irritation persists: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- Rinse mouth
- In case of fire: Use CO2, dry chemical, or foam for extinction

**Storage**

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

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

Toxic 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  
 Inhalation, ingestion, or skin absorption of methanol can cause blindness  
 SEE SAFETY DATA SHEET  
 Acute Toxicity 37.52760754 % of the mixture consists of ingredient(s) of unknown toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS-No	Weight-%
ETHYL ALCOHOL	-	30 - 60%
ETHYL POLYSILICATE	11099-06-2	10 - 30%

TREATED MICA (RESPIRABLE DUST)	12001-26-2	1 - 10%
YELLOW IRON OXIDE	51274-00-1	1 - 10%
METHYL ALCOHOL	-	1 - 10%
ETHYL SILICATE	78-10-4	1 - 10%
TRIMETHYL BORATE	121-43-7	1 - 10%
ACETIC ACID ETHYL ESTER	-	1 - 10%
METHYL ISOBUTYL KETONE	108-10-1	0.1 - 1%
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	0.1 - 1%

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

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes. If eye irritation persists, consult a specialist.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.
<b>Inhalation</b>	Remove to fresh air. Oxygen or artificial respiration if needed. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Get medical attention immediately.
<b>Self-protection of the first aider</b>	Use personal protective equipment. Avoid contact with eyes, skin and clothing.

##### Most important symptoms and effects, both acute and delayed

**Notes to physician** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Carbon dioxide. Foam. Dry chemical.

**Unsuitable extinguishing media** 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.

##### Protective equipment and precautions for firefighters

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

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

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

**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** **Use only with adequate ventilation.** Avoid contact with eyes, skin and clothing. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. 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. Alkaline. Amines. Acids. Nitrates. Hypochlorites. Boric acid.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
ETHYL ALCOHOL	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	3300 ppm
TREATED MICA (RESPIRABLE DUST) 12001-26-2	TWA: 3 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	1500 mg/m <sup>3</sup>
METHYL ALCOHOL	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup> Skin	6000 ppm
ETHYL SILICATE 78-10-4	TWA: 10 ppm	TWA: 10 ppm TWA: 85 mg/m <sup>3</sup> TWA: 100 ppm TWA: 850 mg/m <sup>3</sup>	700 ppm
ACETIC ACID ETHYL ESTER	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m <sup>3</sup>	2000 ppm

METHYL ISOBUTYL KETONE 108-10-1	TWA: 20 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 205 mg/m <sup>3</sup> STEL: 75 ppm STEL: 300 mg/m <sup>3</sup> TWA: 100 ppm TWA: 410 mg/m <sup>3</sup>	500 ppm
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	50 mg/m <sup>3</sup>

**Appropriate engineering controls****Engineering measures**

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

**Individual protection measures, such as personal protective equipment****Eye/face protection**

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

**Skin and body protection**

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

**Respiratory protection**

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

**General hygiene considerations**

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	aromatic
<b>Appearance</b>	opaque	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		
<b>Property</b>	<b>Values</b>	<b>Remarks</b>	
<b>pH</b>		No data available	
<b>Melting point / freezing point</b>		No data available	
<b>Boiling point / boiling range</b>	64 °C / 147.0 °F		
<b>Flash point</b>	12 °C / 53.0 °F	Pensky Martens - Closed Cup	
<b>Evaporation rate</b>		No data available	
<b>Flammability (solid, gas)</b>		Not applicable	
<b>Flammability Limit in Air</b>		No data available	
<b>Upper flammability limit</b>	N/A		
<b>Lower flammability limit</b>	2.2		
<b>Vapor pressure</b>		No data available	
<b>Vapor density</b>		No data available	
<b>Specific gravity</b>	0.95927	g/cm <sup>3</sup>	
<b>Water solubility</b>	Insoluble in cold water		
<b>Solubility in other solvents</b>		No data available	
<b>Partition coefficient: n-octanol/water</b>		No data available	
<b>Autoignition temperature</b>		No data available	
<b>Decomposition temperature</b>		Not applicable	
<b>Kinematic viscosity</b>		Not applicable	
<b>Dynamic viscosity</b>	225 centipoises		

**Other Information**

Density 8.00034 lbs/gal  
 Volatile organic compounds (VOC) content 4.66488 lbs/gal  
 Total volatiles weight percent 59.59 %  
 Total volatiles volume percent 72.24 %

**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, Alkaline, Amines, Acids, Nitrates, Hypochlorites, Boric acid

**Hazardous decomposition products**

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

**11. TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure**

**Inhalation** HARMFUL BY INHALATION. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

**Eye contact** Causes serious eye irritation.

**Skin contact** Irritating to skin.

**Ingestion** Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
ETHYL ALCOHOL	= 7060 mg/kg ( Rat )		= 124.7 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
ETHYL SILICATE 78-10-4	= 6270 mg/kg ( Rat )	= 6300 µL/kg ( Rabbit )	
TRIMETHYL BORATE 121-43-7	= 6140 mg/kg ( Rat )	= 1980 µL/kg ( Rabbit )	
ACETIC ACID ETHYL ESTER	= 5620 mg/kg ( Rat )	> 18000 mg/kg ( Rabbit ) > 20 mL/kg ( Rabbit )	
METHYL ISOBUTYL KETONE 108-10-1	= 2080 mg/kg ( Rat )	= 3000 mg/kg ( Rabbit )	= 8.2 mg/L ( Rat ) 4 h
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	= 500 mg/kg ( Rat )		

**Information on toxicological effects**

**Symptoms** Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. Irritating to eyes and skin.

**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. Substances known to impair fertility. May cause cancer.

**Sensitization**

No information available.

**Mutagenicity**

May cause genetic defects.

**Carcinogenicity**

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

Component	ACGIH	IARC	NTP	OSHA
ETHYL ALCOHOL	A3	Group 1	Known	X
METHYL ISOBUTYL KETONE 108-10-1	A3	Group 2B		X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	A2	Group 1	Known	X

**Reproductive effects**

No information available.

**STOT - single exposure**

Eyes, Skin, Respiratory system, Central Nervous System (CNS)

**STOT - repeated exposure**

No information available

**Aspiration hazard**

Not applicable.

**Acute Toxicity**

37.52760754 % of the mixture consists of ingredient(s) of unknown toxicity. mg/kg mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Toxic to aquatic life with long lasting effects

44.59361 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia
ETHYL ALCOHOL		12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50
YELLOW IRON OXIDE 51274-00-1		EC50: > 1,000 mg/l (Golden orfe (Leuciscus idus), 48 h)	
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	
ACETIC ACID ETHYL ESTER	3300: 48 h Desmodesmus subspicatus mg/L EC50	220 - 250: 96 h Pimephales promelas mg/L LC50 flow-through 484: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 352 - 500: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	560: 48 h Daphnia magna mg/L EC50 Static
METHYL ISOBUTYL KETONE 108-10-1	400: 96 h Pseudokirchneriella subcapitata mg/L EC50	496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through	170: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility in Environmental Media**

Component	log Pow
ETHYL ALCOHOL	-0.32
METHYL ALCOHOL	-0.77
ACETIC ACID ETHYL ESTER	0.6
METHYL ISOBUTYL KETONE 108-10-1	1.19

**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
METHYL ALCOHOL		Included in waste stream: F039		U154
ACETIC ACID ETHYL ESTER		Included in waste stream: F039		U112
METHYL ISOBUTYL KETONE 108-10-1		Included in waste stream: F039		U161

Component	CAWAST
ETHYL ALCOHOL	Toxic Ignitable
METHYL ALCOHOL	Toxic Ignitable
ACETIC ACID ETHYL ESTER	Toxic Ignitable

**14. TRANSPORT INFORMATION**

**DOT**

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

**IATA**

UN/ID no. 1263  
 Proper Shipping Name paint  
 Hazard Class 3  
 Packing Group II  
 ERG Code 366



**Additional information**

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

**15. REGULATORY INFORMATION**

**International Inventories**

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

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

<b>Component</b>	<b>HAPS Data</b>
METHYL ALCOHOL	
METHYL ISOBUTYL KETONE	

**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
METHYL ALCOHOL -	1.0
METHYL ISOBUTYL KETONE - 108-10-1	1.0

**SARA 311/312 Hazardous**

**Categorization**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
METHYL ALCOHOL	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
ACETIC ACID ETHYL ESTER	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
METHYL ISOBUTYL KETONE 108-10-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**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

ETHYL ALCOHOL -	Carcinogen Developmental
METHYL ALCOHOL -	Developmental
METHYL ISOBUTYL KETONE - 108-10-1	Carcinogen Developmental
CRYSTALLINE SILICA (QUARTZ) - 14808-60-7	Carcinogen

**California SCAQMD Rule 443**

Contains Photochemically Reactive Solvent

**State Right-to-Know**

Component	New Jersey	Massachusetts	Pennsylvania
ETHYL ALCOHOL	X	X	X
ETHYL POLYSILICATE 11099-06-2			X
TREATED MICA (RESPIRABLE DUST) 12001-26-2	X	X	X
METHYL ALCOHOL	X	X	X
ETHYL SILICATE 78-10-4	X	X	X
TRIMETHYL BORATE 121-43-7	X	X	X
ACETIC ACID ETHYL ESTER	X	X	X
METHYL ISOBUTYL KETONE 108-10-1	X	X	X
CRYSTALLINE SILICA (QUARTZ) 14808-60-7	X	X	X

**16. OTHER INFORMATION**

**NFPA** Health 2 Flammability 3 Instability 1 Physical hazard \*  
**HMIS (Hazardous Material Information System)** Health 2\* Flammability 3 Reactivity 1

**Prepared By** Tnemec Regulatory Dept: 816-474-3400  
**Revision Date** 04-Feb-2016  
**Revision Summary**  
 9 4 5 7 10 8 11 14

**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** No data available

**Revision Date** 26-May-2015

**Revision Number** 3

## 1. IDENTIFICATION

### Product identifier

**Product Code** F090-0098B  
**Product Name** TNEME-ZINC ZINC PIGMENT

### Other means of identification

**Common Name** SERIES 90-98 PART B

### Recommended use of the chemical and restrictions on use

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

### Details of the supplier of the safety data sheet

**Manufacturer Address**  
Tnemec Company, Inc. 6800 Corporate Drive, Kansas City, MO 64120-1372

### 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)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

### Label elements

#### EMERGENCY OVERVIEW

#### **Hazard statements**

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

**Appearance** dark grey

**Physical state** powder

**Odor** odorless

#### **Precautionary Statements**

##### **Response**

Get medical advice/attention if you feel unwell

##### **Storage**

Keep away from children

### Hazards not otherwise classified (HNOC)

May cause respiratory irritation  
 May cause skin and eye irritation  
 May form combustible dust concentrations in air

**Other information**

Very toxic to aquatic life with long lasting effects

Inhalation of metallic zinc dust may result in symptoms known as metal fume fever. Symptoms include chills, fever, muscular pain, nausea and vomiting

SEE SAFETY DATA SHEET

Acute Toxicity

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight-%
ZINC (TOTAL DUST)	7440-66-6	60 - 100%
ZINC OXIDE (TOTAL DUST)	1314-13-2	1 - 10%

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

### 4. FIRST AID MEASURES

#### Description of first aid measures

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

#### Most important symptoms and effects, both acute and delayed

**Notes to physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide (CO<sub>2</sub>). 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 Dusts or fumes may form explosive mixtures in air

**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. Zinc oxide fume.

#### 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

**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 in a dry and well-ventilated place.

**Incompatible products** Water. Strong oxidizing agents. Acids. Bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
ZINC OXIDE (TOTAL DUST) 1314-13-2	TWA: 2 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>  TWA: 15 mg/m <sup>3</sup>	500 mg/m <sup>3</sup>

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

<b>Skin and body protection</b>	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
<b>Respiratory protection</b>	Use only with adequate ventilation. Do not breathe vapors, spray mist, or dust. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist or dust levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use.
<b>General hygiene considerations</b>	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

<b>Physical state</b>	powder	<b>Odor</b>	odorless
<b>Appearance</b>	dark grey	<b>Odor threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>
<b>pH</b>		No data available
<b>Melting point / freezing point</b>		No data available
<b>Boiling point / boiling range</b>	72 °C / 162 °F	No information available
<b>Flash point</b>	No information available	
<b>Evaporation rate</b>		No data available
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limit in Air</b>		No data available
<b>Upper flammability limit</b>	N/A	
<b>Lower flammability limit</b>	N/A	
<b>Vapor pressure</b>		No data available
<b>Vapor density</b>		No data available
<b>Specific gravity</b>	7.05028	g/cm3
<b>Water solubility</b>	Insoluble in cold water	
<b>Solubility in other solvents</b>		No data available
<b>Partition coefficient: n-octanol/water</b>		No data available
<b>Autoignition temperature</b>		No data available
<b>Decomposition temperature</b>		No data available
<b>Kinematic viscosity</b>		No data available
<b>Dynamic viscosity</b>		No data available

### Other Information

<b>Density</b>	58.79932 lbs/gal
<b>Volatile organic compounds (VOC) content</b>	0 lbs/gal
<b>Total volatiles weight percent</b>	0 %
<b>Total volatiles volume percent</b>	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**

Water, 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. Zinc oxide fume.

**11. TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure**

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	Irritating to eyes.
<b>Skin contact</b>	Irritating to skin.
<b>Ingestion</b>	Harmful if swallowed.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
ZINC OXIDE (TOTAL DUST) 1314-13-2	> 5000 mg/kg ( Rat )		

**Information on toxicological effects**

**Symptoms** Inhalation of metallic zinc dust may result in symptoms known as metal fume fever. Symptoms include chills, fever, muscular pain, nausea and vomiting.

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

<b>Chronic Toxicity</b>	Avoid repeated exposure.
<b>Sensitization</b>	No information available.
<b>Mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b>Reproductive effects</b>	No information available.
<b>STOT - single exposure</b>	No information available
<b>STOT - repeated exposure</b>	No information available
<b>Aspiration hazard</b>	No information available.

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

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Very toxic to aquatic life with long lasting effects

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

Component	Toxicity to algae	Toxicity to fish	Toxicity to daphnia

<p>ZINC (TOTAL DUST) 7440-66-6</p>	<p>0.11 - 0.271: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.09 - 0.125: 72 h Pseudokirchneriella subcapitata mg/L EC50 static</p>	<p>30: 96 h Cyprinus carpio mg/L LC50 7.8: 96 h Cyprinus carpio mg/L LC50 static 0.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.59: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 2.66: 96 h Pimephales promelas mg/L LC50 static 3.5: 96 h Lepomis macrochirus mg/L LC50 static 0.45: 96 h Cyprinus carpio mg/L LC50 semi-static 0.41: 96 h Oncorhynchus mykiss mg/L LC50 static 2.16 - 3.05: 96 h Pimephales promelas mg/L LC50 flow-through 0.211 - 0.269: 96 h Pimephales promelas mg/L LC50 semi-static</p>	<p>0.139 - 0.908: 48 h Daphnia magna mg/L EC50 Static</p>
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**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
ZINC (TOTAL DUST) 7440-66-6	Ignitable Toxic
ZINC OXIDE (TOTAL DUST) 1314-13-2	Toxic

**14. TRANSPORT INFORMATION**

**DOT**

**Proper Shipping Name**                      ZINC METAL PIGMENT Not regulated

**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**

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

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**United States of America**

**SARA 313**

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

Component	SARA 313 - Threshold Values
ZINC (TOTAL DUST) - 7440-66-6	1.0
ZINC OXIDE (TOTAL DUST) - 1314-13-2	1.0

**SARA 311/312 Hazardous Categorization**

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

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ZINC (TOTAL DUST) 7440-66-6		X	X	
ZINC OXIDE (TOTAL DUST) 1314-13-2		X		

**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs	RQ
ZINC (TOTAL DUST) 7440-66-6	1000 lb		RQ 454 kg final RQ RQ 1000 lb final RQ

**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

ZINC (TOTAL DUST) 7440-66-6	X	X	X
ZINC OXIDE (TOTAL DUST) 1314-13-2	X	X	X

**16. OTHER INFORMATION**

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

Prepared By Tnemec Regulatory Dept: 816-474-3400  
 Revision Date 26-May-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.

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**End of MSDS**