

Product Name: PENETROX™ A OXIDE INHIBITING COMPOUND
Revision Date: 1 August 2011 (rev 3)
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SAFETY DATA SHEET

SECTION 1	PRODUCT AND COMPANY IDENTIFICATION
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PRODUCT

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SECTION 3	COMPOSITION / INFORMATION ON INGREDIENTS
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Reportable Hazardous Substance(s) or Complex Substance(s)

Name	Common Name/Synonym	CAS#	Percentage	Impurities
Zinc (dust and fume)	Zinc powder; Metallic zinc; Blue powder	7440-66-6	51-53%	None Known
Mineral Oil Naphthenic Vacuum Distillate	Petroleum distillates, light	64741-52-2	42-46%	None Known

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

** The product may contain additional non-hazardous or trade secret components.

SECTION 4	FIRST AID MEASURES
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ROUTES OF ENTRY: Ingestion, Contact

EMERGENCY AND FIRST AID PROCEDURES:

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SECTION 6

ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for firefighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for Personal Protective Equipment.

ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewer, basements or confined areas. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

CLEAN UP AND CONTAINMENT METHODS

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. Do not touch or walk through spilled material. Avoid direct contact and wear specific protective equipment specified in section 8. Absorb or cover with dry earth, sand or other non-combustible material and vacuum or sweep to transfer material to containers. Prevent entry into waterways, sewer, basements or confined areas.

Water Spill: Use caution as zinc may release hydrogen gas on contact with water. Confine the spill immediately with booms. Stop leak if you can do it without risk. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material:

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Zinc (dust and fume)	7440-66-6	STEL	N/A	10 mg/m ³ (Resp.)	See Note Below
Mineral Oil Naphthenic Vacuum Distillate	64741-52-2	TWA	5 mg/m ³ (mist)	5 mg/m ³ (mist)	N/A

*Exposure limits for zinc dust have not been set by OSHA or ACGIH. There are occupational standards for zinc oxide, which may be formed from zinc dust during welding, burning, and other fuming processes.

ENGINEERING CONTROLS

General and/or local exhaust ventilation is recommended to maintain air quality and keep airborne exposures below recommended occupational exposure limits. Eyewash stations and washing facilities should be located in close proximity to work operations in which this product is used.

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: Respiratory protection is not expected to be required under normal usage of this material. A NIOSH approved respirator is recommended in situations where airborne contaminant concentration has not been confirmed to be below safe levels.

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Flash Point [Method]: $>148^{\circ}\text{C}$ (375°F) [ASTM D92]

Flammable Limits (Approximate volume % in air): Not Volatile - Not Applicable

Autoignition Temperature: Zinc: 460°C (860°F), Mineral oil: $260\text{--}371^{\circ}\text{C}$ ($500\text{--}700^{\circ}\text{F}$)

Flammability: Not Readily Flammable

Decomposition Temperature: Not Available

Boiling Point/Range: $> 600^{\circ}\text{F}$

Melting/Freezing Point: Not Applicable

Vapor Pressure: $< 0.001\text{ mmHg}$ at 25°C

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Skin Contact: Prolonged contact may lead mild skin irritation, folliculitis, oil acne, and dermatitis.

Inhalation: Breathing vapors, mists, or fumes may cause irritation to respiratory tract, especially if product has been heated. Inhalation of metal oxides may cause metal fume fever.

Ingestion: May cause gastric irritation.

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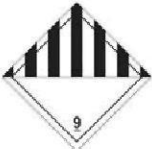
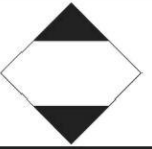
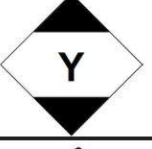
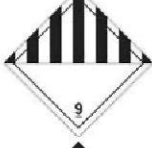
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exposures, but vegetation may accumulate higher levels of zinc if grown in contaminated soils. Although

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ADR	UN3077	Environmentally hazardous substance, solid, n.o.s. (Zinc)	9	III			
							May be offered as a Limited Quantity (See ADR Table A)
IATA	UN3077	Environmentally hazardous substance, solid, n.o.s. (Zinc)	9	III			
							May be offered as a Limited Quantity (See IATA PI Y911)
IMDG	UN3077	Environmentally hazardous substance, solid, n.o.s. (Zinc)	9	III			
							Zinc is a marine pollutant

SECTION 15

REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purpose, this material is

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INTERNATIONAL REGULATIONS:

WHMIS CLASSIFICATION

Class D2A: Possible Carcinogen
Class D2B: Skin/Eye Irritant

WHMIS HAZARD SYMBOLS



EUROPEAN INVENTORY OF EXISTING CHEMICALS (EINECS):

Chemical Name	CAS Number	List Citations
Zinc (dust and fume)	7440-66-6	231-175-3
Mineral Oil Naphthenic Vacuum Distillate	64741-52-2	265-053-6

EU RISK (R) AND SAFETY (S) PHRASES:

R 15: Contact with water liberates flammable gas
R 22: Harmful if swallowed
R 36/38: Irritating to the eyes and skin
R 45: May cause cancer
R 51/53: Toxic to aquatic organisms, may cause long term adverse effects in aquatic environment
S 8: Keep container dry
S 20: When using do not eat or drink
S 24/25: Avoid contact with skin and eyes
S 29: Avoid release to the environment

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
Zinc (dust and fume)	7440-66-6	
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Health - 1

Flammability - 1

Reactivity - 1

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) RATINGS:

Health - 1*

Flammability - 1

Physical Hazard - 1

PPE - B

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Date	Description	Sections Affected
6/2/11	MSDS Version written	