



To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrant or guarantee the information. We provide vendor SDSs to assist our customers in their compliance efforts. The attached document is in compliance with one of the respective country regulatory requirements noted below:

The OSHA Hazard Communication Standard (in the United States)  
The Hazardous Products Regulations (in Canada)

We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Product Stewardship Team  
Zep Inc.

Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND  
Revision Date: 21 November 2016 (rev B)  
Page 1 of 8

## SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT

**Product Name:** PENETROX™ A-13 OXIDE INHIBITING COMPOUND

**Product Description:** Oxide inhibiting compound with evenly distributed zinc particles.

**Intended Use:** Aluminum to aluminum connections, aluminum to copper connections, and aluminum conduit threads.

#### COMPANY IDENTIFICATION

**Supplier:** BURNDY LLC  
47 East Industrial Park Drive  
Manchester, NH 03109USA

**24 Hour Emergency (INFOTRAC)** (800) 535-5053 (*US and Canada*)  
(352) 323-3500 (*International*)  
**Burndy Informational Number** (603) 647-5000

### SECTION 2 HAZARDS IDENTIFICATION

#### CLASSIFICATION

Health	Environmental	Physical
•No Classifiable hazards	•No Classifiable hazards	•No Classifiable hazards

#### LABELLING

<b>Symbols:</b> Not Applicable	
<b>Signal Word:</b> Not Applicable	
<b>Hazard Statements</b> Not Applicable	<b>Precautionary Statements</b> Not Applicable

#### ADDITIONAL INFORMATION

**Hazard not otherwise classified:** Not applicable

97 % of the mixture consists of ingredient(s) of unknown acute toxicity.

**WHMIS Classification(s):** Not controlled

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### MIXTURES

Name	CAS #	Wt. Percentage*
Zinc Oxide	1314-13-2	1 - 5

\* 95-99% material composition inclusive of inert and non-hazardous filler withheld as trade secret in accordance with paragraph 1910.1200(i)(1).

Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND  
Revision Date: 21 November 2016 (rev B)  
Page 2 of 8

## SECTION 4 FIRST AID MEASURES

### DESCRIPTION OF THE FIRST AID MEASURE

**Eye:** In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. This compound contains abrasive particles. If irritation persists, get medical attention.

**Skin:** In case of contact, immediately flush skin with plenty of water. Call a physician if irritation develops and persists.

**Inhalation:** Not a normal route of exposure. If symptoms develop, remove to fresh air. Get medical attention if condition worsens.

**Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

### MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

**Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

**Skin:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

**Inhalation:** Not a normal route of exposure.

**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

**Note to Physicians:** Symptoms may not appear immediately.

**Specific Treatments:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5 FIRE FIGHTING MEASURES

### FLAMMABILITY

**Flammability:** Not flammable by WHMIS/OSHA criteria.

### EXTINGUISHING MEDIA

**Suitable Extinguishing Media:** Dry chemical, foam, carbon dioxide.

**Unsuitable Extinguishing Media:** Not available.

### SPECIAL HAZARDS ARISING FROM THE CHEMICAL

**Products of Combustion:** May include, and are not limited to: oxides of carbon.

### Explosion Data:

**Sensitivity to Mechanical Impact:** Not available.

**Sensitivity to Static Discharge:** Not available.

### SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA)

Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND  
Revision Date: 21 November 2016 (rev B)  
Page 3 of 8

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

### METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

**Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

**Methods for Cleaning-Up:** Scoop up material and place in a disposal container.

## SECTION 7 HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

**Handling:** Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Handle and open container with care. When using do not eat or drink. (See section 8).

**General Hygiene Advice:** Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

**Storage:** Keep out of the reach of children. Keep container tightly closed. (See section 10)

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### CONTROL PARAMETERS:

#### Exposure Guidelines

Occupational Exposure Limits				
Ingredient	OSHA-PEL	ACGIH-TLV	UK-WEL	EU-IOELV
Zinc oxide	5 mg/m <sup>3</sup> (fume); 15 mg/m <sup>3</sup> (total dust); 5 mg/m <sup>3</sup> (resp)	2 mg/m <sup>3</sup> (resp)	Not applicable	Not applicable

### EXPOSURE CONTROLS

**Engineering Controls:** Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

### INDIVIDUAL PROTECTIVE MEASURES

#### Personal Protective Equipment:

**Eye/Face Protection:** Safety glasses or goggles are recommended when using product.

#### Skin Protection:

**Hand Protection:** None required.

**Body Protection:** Wear suitable protective clothing.

Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND  
Revision Date: 21 November 2016 (rev B)  
Page 4 of 8

**Respiratory Protection:** None required

**General Health and Safety Measures:** Handle according to established industrial hygiene and safety practices. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

<b>SECTION 9</b>	<b>PHYSICAL/CHEMICAL PROPERTIES</b>
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**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Paste / Thick grease.

**Color:** Gray.

**Odor:** Not available.

**Odor Threshold:** Not available.

**Physical State:** Solid.

**pH:** Not available.

**Melting Point/Freezing Point:** Not available.

**Initial Boiling Point and Boiling Range:** Not available.

**Flash Point:** >250 °C (>500 °F)

**Evaporation Rate:** Not available.

**Flammability:** Not flammable.

**Lower Flammability/Explosive Limit:** Not available.

**Upper Flammability/Explosive Limit:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Relative Density/Specific Gravity:** Not available.

**Solubility:** Not available.

**Partition coefficient: n-octanol/water:** Not available.

**Auto-ignition Temperature:** Not available.

**Decomposition Temperature:** Not available.

**Viscosity:** Not available.

**Oxidizing Properties:** Not available.

**Explosive Properties:** Not available.

Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND  
Revision Date: 21 November 2016 (rev B)  
Page 5 of 8

## SECTION 10 STABILITY AND REACTIVITY

### REACTIVITY

No dangerous reaction known under conditions of normal use.

### CHEMICAL STABILITY

Stable under normal storage conditions.

### POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

### CONDITIONS TO AVOID

Heat.

### INCOMPATIBLE MATERIALS

None known.

### HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon.

## SECTION 11 TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

**Likely Routes of Exposure:** Skin contact, eye contact, and ingestion.

#### Symptoms related to physical/chemical/toxicological characteristics:

**Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

**Skin:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

**Inhalation:** Not a normal route of exposure.

#### ACUTE TOXICITY:

<b><u>Inгредиент</u></b>	<b>LC50</b>	<b>LD50</b>
Zinc oxide	Not available.	Oral >5000 mg/kg, rat;

<b>Calculated overall Chemical Acute Toxicity Values</b>		
<b>LC50 (inhalation)</b>	<b>LD50 (oral)</b>	<b>LD50 (dermal)</b>
Not available.	Not available.	Not available.

<b><u>Inгредиент</u></b>	<b>Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*</b>
Zinc oxide	Not listed.

\* See Section 15 for more information.

Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND  
Revision Date: 21 November 2016 (rev B)  
Page 6 of 8

## DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

**Skin Corrosion/Irritation:** Based on available data, the classification criteria are not met.

**Serious Eye Damage/Irritation:** Based on available data, the classification criteria are not met.

**Respiratory Sensitization:** Based on available data, the classification criteria are not met.

**Skin Sensitization:** Based on available data, the classification criteria are not met.

**STOT-Single Exposure:** Based on available data, the classification criteria are not met.

### Chronic Health Effects:

**Carcinogenicity:** Based on available data, the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on available data, the classification criteria are not met.

### Reproductive Toxicity:

**Developmental:** Based on available data, the classification criteria are not met.

**Teratogenicity:** Based on available data, the classification criteria are not met.

**Embryotoxicity:** Based on available data, the classification criteria are not met.

**Fertility:** Based on available data, the classification criteria are not met.

**STOT-Repeated Exposure:** Based on available data, the classification criteria are not met.

**Aspiration Hazard:** Based on available data, the classification criteria are not met.

**Toxicologically Synergistic Materials:** Not available.

**Other Information:** Not available.

## SECTION 12

## ECOLOGICAL INFORMATION

### ECOTOXICITY

**Acute/Chronic Toxicity:** May cause long-term adverse effects in the aquatic environment.

### PERSISTENCE AND DEGRADABILITY

Not available.

### BIOACCUMULATIVE POTENTIAL

**Bioaccumulation:** Not available.

### MOBILITY IN SOIL

Not available.

### OTHER ADVERSE EFFECTS

Not available.

## SECTION 13

## DISPOSAL CONSIDERATIONS

### WASTE TREATMENT METHODS

**Disposal Method:** This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

**Other disposal recommendations:** Not available.

Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND

Revision Date: 21 November 2016 (rev B)

Page 7 of 8

## SECTION 14 TRANSPORTATION

Regulatory Information	UN Number	Proper Shipping Name	Hazard Class	Packing Group	Label(s)	RQ	Additional Information
US DOT	Not regulated by DoT						
TDG	Not regulated by TDG						
ADR	Not regulated by ADR						
IATA	Not regulated by IATA						
IMDG	Not regulated by IMDG						

## SECTION 15 REGULATORY INFORMATION

### SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

**Canada:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

**US:** SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Zinc oxide	Not listed.	Not listed.	Not listed.	Not listed.

### State Regulations

#### California Proposition 65:

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

### Global Inventories:

Ingredient	Canada DSL/NDL	USA TSCA
Zinc oxide	DSL	Yes.

#### NFPA National Fire Protection Association:

Health:	1
Fire:	1
Reactivity:	0

#### HMIS-Hazardous Materials Identification System

Health:	1
Fire:	1
Physical Hazard:	0



Product Name: PENETROX™ A-13 OXIDE INHIBITING COMPOUND

Revision Date: 21 November 2016 (rev B)

Page 8 of 8

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

#### SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

**CP65 California Proposition 65**

**OSHA (O) Occupational Safety and Health Administration.**

**ACGIH (G) American Conference of Governmental Industrial Hygienists.**

- A1 - Confirmed human carcinogen.
- A2 - Suspected human carcinogen.
- A3 - Animal carcinogen.
- A4 - Not classifiable as a human carcinogen.
- A5 - Not suspected as a human carcinogen.

**IARC (I) International Agency for Research on Cancer.**

- 1 - The agent (mixture) is carcinogenic to humans.
- 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

**NTP (N) National Toxicology Program.**

- 1 - Known to be carcinogens.
- 2 - Reasonably anticipated to be carcinogens.

<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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#### THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Date	Description	Sections Affected
6/2/11	MSDS Version written	1-11
7/21/11	Updated to GHS criteria, additional sections added.	1-16
8/1/11	Updated	15
11/08/12	Updated	1, 3, 8, 9, 11, 12, 15
4/2/13	Updated	11
7/5/13	Version number update	-
7/25/14	Updates	3,15
9/16/15	Updates	1-16
10/28/15	Updates	1-16
11/21/16	Updates	8

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