

Product Name: PENETROX™ HT X-1552A OXIDE INHIBITING COMPOUND
Revision Date: 27 April 2016 (rev C)
Page 1 of 10

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: PENETROX™ HT X-1552A oxide inhibiting compound

Product Description: Synthetic silicone based compound with evenly distributed zinc particles and nickel aluminum alloy particles.

Intended Use: Aluminum to aluminum connections.

COMPANY IDENTIFICATION

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

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
•Skin Sensitization - Category 1 •Carcinogenicity - Category 2 •Specific target organ toxicity - Repeated exposure 1	•No classifiable hazards	•No classifiable hazards

LABELLING

Symbols:	
 Irritant	 Health Hazard
Signal Word: Danger	

Product Name: PENETROX™ HT X-1552A OXIDE INHIBITING COMPOUND

Revision Date: 27 April 2016 (rev C)

Page 2 of 10

Hazard Statements	Precautionary Statements
<ul style="list-style-type: none"> • H317: May cause an allergic skin reaction. • H351: Suspected of causing cancer. • H372: Causes damage to organs through prolonged or repeated exposure. 	<ul style="list-style-type: none"> • P201: Obtain special instructions before use. • P202: Do not handle until all safety precautions have been read and understood. • P260: Do not breathe dust/fume/gas/mist/vapours/spray. • P264: Wash hands thoroughly after handling. • P270: Do not eat, drink or smoke when using this product. • P272: Contaminated work clothing must not be allowed out of the workplace. • P280: Wear protective gloves/protective clothing/eye protection/face protection. • P308+313: If exposed or concerned: Get medical advice/attention. • P302+352: If on skin: Wash with plenty of soap and water. • P363: Wash contaminated clothing before reuse. • P333+313: If skin irritation or rash occurs: Get medical advice /attention. • P405: Store locked up. • P501: Dispose of contents and container in accordance with all local, regional, national and international regulations.

ADDITIONAL INFORMATION

Hazards not otherwise classified: Not applicable.

47 % of the mixture consists of ingredient(s) of unknown acute toxicity.

WHMIS Classification(s):

D2A - Carcinogenicity
D2B - Skin Sensitization

WHMIS Hazard Symbols:



WHMIS Signal Word: WARNING

SECTION 3	COMPOSITION / INFORMATION ON INGREDIENTS
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MIXTURES

Ingredient	CAS#	Wt. Percentage*
Nickel	7440-02-0	7 - 13
Aluminium, elemental	7429-90-5	7 - 13
Zinc oxide	1314-13-2	0.5 - 1.5

*72.5 – 85.5% material composition inclusive of inert and non-hazardous filler withheld as trade secret in accordance with paragraph 1910.1200(i)(1).

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. Remove contaminated clothing and shoes. Wash clothing before reuse. 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. May cause sensitization by skin contact.

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: Do not use water jet.

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).

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. Spilled material may present a slipping hazard.

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

EXPOSURE GUIDELINES

Exposure Guidelines

Occupational Exposure Limits		
Ingredient	OSHA-PEL	ACGIH-TLV
Nickel	1 mg/m ³	1.5 mg/m ³
Aluminum, elemental	15 mg/m ³ (total dust); 5 mg/m ³ (respirable fraction)	1 mg/m ³ (respirable fraction)
Zinc oxide	5 mg/m ³ (fume); 15 mg/m ³ (total dust); 5 mg/m ³ (resp)	2 mg/m ³ (resp)

Product Name: PENETROX™ HT X-1552A OXIDE INHIBITING COMPOUND
Revision Date: 27 April 2016 (rev C)
Page 5 of 10

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: Wear chemical resistant gloves.

Body Protection: Wear suitable protective clothing.

Respiratory Protection: None necessary under normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment.

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.

SECTION 9

PHYSICAL/CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Paste / Thick grease.

Color: Not available.

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: Not available.

Evaporation Rate: Not available.

Flammability: Not flammable.

Lower Flammability/Explosive Limit: Not available.

Upper Flammability/Explosive Limit: Not available.

Product Name: PENETROX™ HT X-1552A OXIDE INHIBITING COMPOUND
Revision Date: 27 April 2016 (rev C)
Page 6 of 10

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.

Explosive Properties: Not available.

Oxidizing Properties: Not available.

SECTION 10	STABILITY AND REACTIVITY
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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.

INCOMPATIBLE MATERIALS

Oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS

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

SECTION 11	TOXICOLOGICAL INFORMATION
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INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, skin absorption, 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.

Product Name: PENETROX™ HT X-1552A OXIDE INHIBITING COMPOUND

Revision Date: 27 April 2016 (rev C)

Page 7 of 10

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

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

Inhalation: Not a normal route of exposure.

ACUTE TOXICITY:

Ingredient	LC50	LD50
Nickel	Not available.	Oral >9000 mg/kg, rat
Aluminum, elemental	Not available.	Oral >10000 mg/kg, rat
Zinc oxide	Inhalation >5.7 mg/l 4h, rat	Oral >5000 mg/kg, rat; Dermal >2000 mg/kg, rat

Calculated overall Chemical Acute Toxicity Values		
LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
Not available.	> 2000 mg/kg, rat	> 2000 mg/kg, rabbit

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Nickel	G-A5, I-2B, N-2, CP65
Aluminum, elemental	G-A4
Zinc oxide	Not listed.

* See Section 15 for more information.

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: May cause an allergic skin reaction.

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

Chronic Health Effects:

Carcinogenicity: Suspected of causing cancer.

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.

Product Name: PENETROX™ HT X-1552A OXIDE INHIBITING COMPOUND
Revision Date: 27 April 2016 (rev C)
Page 8 of 10

STOT-Repeated Exposure: Causes damage to organs through prolonged or repeated exposure.

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
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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
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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.

SECTION 14	TRANSPORTATION
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Container type and size: 4 oz. Squeeze bottle, 8 oz. Squeeze bottle, 1 lb Cartridge, 1 Gallon Can.

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						

Note: The above mentioned containers do not contain nickel, above the Reportable Quantity (RQ) value (100 pounds).

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
Nickel	Not listed.	Not listed.	100	313
Aluminum, elemental	Not listed.	Not listed.	Not listed.	313 (fume/dust)
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/NDSL	USA TSCA
Nickel	DSL	Yes.
Aluminum, elemental	DSL	Yes.
Zinc oxide	DSL	Yes.

NFPA National Fire Protection Association:	
Health:	2
Fire:	1
Reactivity:	0

HMIS-Hazardous Materials Identification System	
Health:	2*
Fire:	1
Physical Hazard:	0

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.

SECTION 16 OTHER INFORMATION

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Date	Description	Sections Affected
06/02/11	MSDS Version written	1-11
07/19/11	Updated to GHS criteria, additional sections added	1-16
08/01/11	Update	15
10/28/15	Update	1-16
02/08/16	Update	14
04/27/16	Update	1-16

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