

SECTION I - IDENTIFICATION

PRODUCT NAME: 3X METAL ETCH

PRODUCT USE: Metal Etch

COMPANY NAME: DirectLine Industries

COMPANY ADDRESS: PO Box 15133 St. Louis, MO 63110

COMPANY PHONE: 866-773-6136

EMERGENCY PHONE: 888-255-3924 (CHEM-TEL)

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION: Skin Corrosion: Category 1C

Eye Corrosion: Category 1

Corrosive to metals: Category 1

HAZARD STATEMENT(S): **DANGER:** Causes Severe skin burns and eye damage. May be corrosive to metals.

This product contains the following percentage of chemicals of unknown toxicity: 0%

PRECAUTIONARY STATEMENTS: Do not breathe mists. Wash hands thoroughly after handling. Wear protective gloves and eye protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents and container in accordance with local, state, and national regulations. Keep only in original container. Absorb spillage to prevent material damage. Store in a corrosive resistant container with a resistant inner liner.



SYMBOL:

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Phosphoric Acid	7664-38-4	30-60%

SECTION IV - FIRST AID MEASURES

EYES: 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 or attention.

INGESTION: If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice or attention.

INHALATION: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

SKIN: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

ACUTE HEALTH HAZARDS: Causes severe burns.

CHRONIC HEALTH HAZARDS: Skin disorders, drying and irritation of the skin.

NOTE TO PHYSICIAN: The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage.

SECTION V – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Use appropriate media for surrounding fire.

UNSUITABLE EXTINGUISHING MEDIA: N/A

SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective clothing and NIOSH approved SCBA with full facepiece operated in positive pressure or pressure demand. Use water mist to keep material cool in fire situations.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Non-combustible. Water spray may be used to keep fire exposed containers cool.

Safety Data Sheet

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Refer to section VIII for proper Personal Protective Equipment.

SPILL: Absorb with non-combustible material like vermiculite, sand or earth. place waste in proper containers for waste disposal.

WASTE DISPOSAL: Dispose of in accordance with federal, state, and local regulations. Do not reuse container and recycle or place in trash collection. Drums and pails should be offered for recycling.

RCRA STATUS: Product should be fully characterized prior to disposal (40 CFR 261).

SECTION VII – HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry area away from extremes of temperature. Keep container tightly sealed when not in use. Store locked up.

INCOMPATIBILITY: Strong alkalis, strong oxidizing agents.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Phosphoric Acid	1 mg/m ³	1 mg/m ³

ENGINEERING CONTROLS / VENTILATION: Provide adequate ventilation to keep vapor concentration below TLV.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved respiratory protection if exposure limits are exceeded.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses and chemical resistant gloves

ADDITIONAL MEASURES: Wash hands and clothing in contact with product after use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless to amber liquid

ODOR: Acid odor

ODOR THRESHOLD: N/D

BOILING POINT: N/D

FREEZING POINT: < 32°F (0°C)

FLAMMABILITY: Not considered a flammable liquid by OSHA (29CFR 1910.1200)

FLASH POINT: N/D

AUTOIGNITION TEMPERATURE:

LOWER FLAMMABILITY LIMIT: N/D

UPPER FLAMMABILITY LIMIT: N/D

VAPOR PRESSURE (mm Hg): 23.8 mmHg @ 77°F (25°C)

VAPOR DENSITY (AIR=1): 1

EVAPORATION RATE: < 0.8 (Slow)

SPECIFIC GRAVITY (H₂O=1): 1.37 @ 77°F (25°C)

pH: <1

SOLIDS (%): N/D

SOLUBILITY IN WATER: 100%

PARTITION COEFFICIENT: n-OCTANOL/WATER (K_{ow}): N/D

VOLATILITY INCLUDING WATER (%): 67%

VOLATILE ORGANIC COMPOUNDS (VOC): 2%

DIELECTRIC STRENGTH (Volts): N/A

DECOMPOSITION TEMPERATURE: N/D

VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY DATA

REACTIVITY: Chemically active metals and bases.

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Chlorine liberating material. Do not mix with bases, ammonia or other cleaning compounds.

INCOMPATIBILITY: Strong alkalis, strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Oxides of Carbon and Acid mist.

Safety Data Sheet

POSSIBLE HAZARDOUS REACTIONS: Will not occur

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Phosphoric Acid (7664-38-4) LD₅₀ (Oral, Rat) 4,400 mg/kg; LD₅₀ (Dermal, Rabbit) > 3,160 mg/kg

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin

EYES: Causes severe burns, stinging, redness, tearing, swelling, and may cause corneal damage, blindness. Burning may not be immediately painful or visible.

INGESTION: Causes gastrointestinal irritation, nausea, vomiting, abdominal cramps.

INHALATION: Causes irritation to the respiratory tract, coughing, shortness of breath.

SKIN: Causes burns to all living tissue.

MEDICAL CONDITION AGGRAVATED: Pre-existing disorders of the skin, respiratory system, and eyes will be aggravated by over exposure.

ACUTE HEALTH HAZARDS: Causes severe burns.

CHRONIC HEALTH HAZARDS: Skin disorders, drying and irritation of the skin.

CARCINOGENICITY: OSHA: No ACGIH: No NTP: No IARC: No OTHER: No

SECTION XII – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Not Established

BIODEGRADABILITY: This product is biodegradable.

BIOACCUMULATION: This product is not expected to bioaccumulate.

SOIL MOBILITY: This product is mobile in soil.

OTHER ECOLOGICAL HAZARDS: None Known

SECTION XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with federal, state, and local regulations. Do not reuse container and recycle or place in trash collection. Drums and pails should be offered for recycling.

RCRA STATUS: Product should be fully characterized prior to disposal (40 CFR 261).

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Phosphoric acid solution, Ltd. Qty.

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1805

PACKAGING GROUP: III

AIR SHIPMENT

PROPER SHIPPING NAME: Phosphoric acid solution, Ltd. Qty.

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1805

SHIPPING BY WATER:

VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Phosphoric acid solution, Ltd. Qty.

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1805

ENVIRONMENTAL HAZARDS WATER: N/A

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All Chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Phosphoric Acid (7664-38-4)
Reportable Quantity = 5,000 lbs

SARA 311/312 HAZARD CATEGORIES: Acute Health, Chronic Health.

Safety Data Sheet

SARA 313 REPORTABLE INGREDIENTS: Phosphoric Acid (7664-38-2)

STATE REGULATIONS: California Proposition 65: None

INTERNATIONAL REGULATIONS:

NFPA HEALTH: 3

NFPA FLAMMABILITY: 0

NFPA REACTIVITY: 0

NFPA OTHER: None

HMIS HEALTH: 3

HMIS FLAMMABILITY: 0

HMIS REACTIVITY: 0

HMIS PROTECTION: B

SECTION XVI - ADDITIONAL INFORMATION

PREPARATION BY: EHS Administrator

DATE PREPARED: 11/22/2013

REVISION DATE: 03/27/2015

N/A = Not Applicable; N/D = Not Determined

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