

MATERIAL SAFETY DATA SHEET

SECTION I - IDENTIFICATION

TRANSPORTATION EMERGENCY:
CHEM-TEL 1-800-255-3924
INFORMATION: 860-347-2505

NFPA HEALTH3
NFPA FLAMMABILITY0
NFPA REACTIVITY2
NFPA PROTECTIONX

DU-LITE CORPORATION
171 RIVER ROAD
MIDDLETOWN, CT 06457

PREPARED BY: WALTER J. SMITH
DATE: 01/06/2022

PRODUCT NAME**ZP-440 (Zinc Phosphate)**

DESCRIPTION Chemical product for producing zinc phosphate coatings.

DOT DESCRIPTION: UN1760, CORROSIVE LIQUID, ACIDIC, INORGANIC N.O.S.,
(Contains Phosphoric Acid, Nitric Acid), 8, PG-II

DOT LABEL: CORROSIVE

DOT PLACARDS: CORROSIVE PLACARD

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	CAS NUMBER	TLV(MG/M3)	PEL(MG/M3)	PERCENT
Nitric Acid	7697-37-2	2.0 PPM	2.0 PPM	1 - 10
Phosphoric Acid	7664-38-2	1.0	1.0	1 - 10
Zinc Dihydrogen Phosphate	7779-90-0	N/E	N/E	30 - 40
Zinc Nitrate	7797-88-6	N/E	N/E	10 - 20
Nickel Nitrate	13138-45-9	0.1 (NI)	0.1 (NI)	< 1.0

N/E = NOT ESTABLISHED N/A = NOT APPLICABLE N/D = NOT DETERMINED

SECTION III - PHYSICAL DATA

BOILING POINT(°F).....>212	SPECIFIC GRAVITY (H2O=1)...1.58
VAPOR PRESSURE (mm Hg)...N/E	MELTING POINT.....N/A
VAPOR DENSITY (Air=1).....N/E	EVAPORATION RATE..... N/E
SOLUBILITY IN H2O.....Complete soluble	PH.....<1.0
APPEARANCE/ODOR.....Green liquid, Odorless	

SECTION IV - REACTIVITY DATA

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBLE MATERIALS: Strong alkali, sulfides, cyanides, oxidizable materials, combustibles, organics.

DECOMPOSITION PRODUCTS: Hydrogen, phosphoric oxides, oxides of nitrogen.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT.....None

FLAMMABLE LIMITS.....None

LOWER FLAME LIMIT.....N/A

HIGHER FLAME LIMIT.....N/A

IN CASE OF FIRE: Non-flammable. Use extinguishing media appropriate to surrounding conditions.

SPECIAL FIREFIGHTING PROCEDURES: Wear protective clothing with self-contained breathing apparatus.

UNUSUAL FIRE HAZARDS: Contact with some metals (i.e. aluminum, tin, zinc, etc.) may release flammable hydrogen gas. Hazardous fumes may be released under thermal decomposition.

SECTION VI - HEALTH HAZARD DATA

ROUTES OF ENTRY: Eye contact, skin contact, inhalation, ingestion.
 HEALTH HAZARDS (ACUTE, CHRONIC): Contains STRONG ACID. Causes severe eye, skin and tissue burns. May be harmful or fatal if swallowed. May cause respiratory tract irritation. Avoid contact with eyes, skin or clothing. Contains OXIDIZER. Contact with other material may cause fire. Contains Manganese compound, chronic inhalation of manganese can cause central nervous system disorders similar to Parkinson's disease. Contains Nickel compound which are suspect carcinogens.
 CARCINOGENICITY: Nickel NTP?: Yes. IARC?: Yes. OSHA REGULATED?: No.
 SYMPTOMS OF EXPOSURE: Eye, skin and respiratory tract irritation. Eye, skin and tissue burns. May cause dermatitis in some individuals who are allergic or sensitive to nickel compounds.
 MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Respiratory ailments.
 FIRST AID: INHALATION: Move victim to fresh air. If not breathing, use artificial respiration. If breathing is difficult, give oxygen. Seek medical attention. EYES: Flush with running water for at least 15 minutes. Seek medical attention. SKIN: Wash affected area with plenty of water. Remove contaminated clothing. If irritation or burns are present, seek medical attention. INGESTION: If conscious, give plenty of water. Do not induce vomiting. Seek medical attention.

SECTION VII - PRECAUTIONS/PROCEDURES

IN CASE OF SPILL: Wear proper protective clothing. Contain spills with inert absorbent. Recover material into a chemical waste container. Neutralize spill area with dilute acid or water.
 WASTE DISPOSAL METHOD: Neutralize with soda ash or lime and dispose of in accordance with federal, state and local regulations.
 PRECAUTIONS: Wear proper protective clothing when using this product. Use with adequate ventilation. Wash thoroughly after handling. Store away from strong alkali. When making a solution, never add water to acid. Always add acid slowly to water with constant stirring.
 OTHER PRECAUTIONS: Emptied containers of this product may contain hazardous vapors or residue. Clean thoroughly before reusing or discarding. Do not use a welding torch to cut container. Do not use for water or food storage.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator if dust, FUMES, or vapors are excessive. VENTILATION: Maintain below PEL, TLV.
 MECHANICAL EXHAUST...X PROTECTIVE GLOVES: Rubber.
 LOCAL EXHAUST.....X EYE PROTECTION: Safety goggles, face shield.
 OTHER PROTECTIVE EQUIPMENT: Rubber apron, rubber boots, coveralls. Eye wash and safety shower.
 WORK/HYGIENIC PRACTICE: Wash after handling, launder clothes.

SECTION IX - SARA TITLE III INFORMATION

HAZARDOUS COMPONENT	CERCLA RQ LBS.	SECT 302 TPQ LBS.	SECT 313 TOXIC	SECT 311/312 HAZARDS
NITRIC ACID	1000	1000	YES	A,B,C
PHOSPHORIC ACID	5000	N/A	YES	A
Zinc Dihydrogen Phosphate	N/A	N/A	YES	A
Zinc Nitrate	1000	N/A	YES	A,C
Nickel Nitrate	100	N/A	YES	A,B,C

A=IMMEDIATE (ACUTE HEALTH HAZARD) B=DELAYED (CHRONIC) HEALTH HAZARD
 C=FIRE HAZARD D= SUDDEN RELEASE OF PRESSURE HAZARD E=REACTIVE HAZARD