



MATERIAL SAFETY DATA SHEET

PHOS DIP - 440

=====
SECTION I - IDENTIFICATION
=====

TRANSPORTATION EMERGENCY: HMIS HEALTH 3
CHEM-TEL 1-800-255-3924 HMIS FLAMMABILITY 0
INFORMATION: 860-347-2505 HMIS REACTIVITY 0
HMIS PROTECTION X

DU-LITE CORPORATION

171 RIVER ROAD

MIDDLETOWN, CT 06457

PREPARED BY: WALTER J. SMITH

DATE: 5/01/2006

PRODUCT NAME **PHOS DIP - 440**

DESCRIPTION Chemical product for producing a Zinc phosphate coatings.

DOT CLASS: CORROSIVE LIQUIDS, N.O.S.,
(CONTAINS PHOSPHORIC ACID, NITRIC ACID), 8, UN 1760, PG II

=====
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
PHOSPHERIC 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

=====
SECTION III - PHYSICAL DATA
=====

BOILING POINT(F).....>212 F 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.....odorless, green liquid.

=====
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: Prolonged contact with some metals (i.e. aluminum, tin zinc etc.) may release flammable hydrogen gas. Hazardous fumes may be released under thermal decomposition.

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 ash or lime. Flush spill area with 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
 and 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 EQUIP. apron, boots, coveralls./ Eye wash and safety shower.
 WORK/HYGIENIC PRACTICES.. 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