



MATERIAL SAFETY DATA SHEET

SECTION I - IDENTIFICATION

TRANSPORTATION EMERGENCY: HMIS HEALTH 3
CHEM-TEL 1-800-255-3924 HMIS FLAMMABILITY 0
INFORMATION: 860-347-2505 HMIS REACTIVITY 2
HMIS PROTECTION X

DU-LITE CORPORATION
171 RIVER ROAD
MIDDLETOWN, CT 06457
PREPARED BY: WALTER J. SMITH
DATE: 05/01/06

PRODUCT NAME**PHOS DIP - 330**
DESCRIPTIONChemical product for producing manganese phosphate coatings.
DOT CLASS: CORROSIVE LIQUIDS, ACIDIC, INORGANIC, N.O.S.,
(CONTAINS PHOSPHORIC ACID, NITRIC ACID),
8, UN 3264, PG II

SECTION II - HAZARDOUS INGREDIENTS

| <u>HAZARDOUS COMPONENT</u> | <u>CAS NUMBER</u> | <u>TLV (MG/M3)</u> | <u>PEL (MG/M3)</u> | <u>PERCENT</u> |
|----------------------------|-------------------|--------------------|--------------------|----------------|
| MANGANESE DIHYDROGEN PHOS. | 18718-07-5 | 5.0 (Mn) | 5.0 (Mn) | 20-30 |
| NICKEL NITRATE | 13478-00-7 | 0.1 (NI) | 0.1 (NI) | <1.0 |
| NITRIC ACID | 7697-37-2 | 2.0 PPM | 2.0 PPM | 1 - 10 |
| PHOSPHERIC ACID | 7664-38-2 | 1.0 | 1.0 | 1 - |

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

SECTION III - PHYSICAL DATA

BOILING POINT(°F).....>212 F SPECIFIC GRAVITY (H₂O=1)... 1.36
VAPOR PRESSURE (mm Hg)....N/E MELTING POINT..... N/A
VAPOR DENSITY (Air=1)....N/E EVAPORATION RATE..... N/E
SOLUBILITY IN H₂O..Complete miscible 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.
DECOMPOSITION PRODUCTS: Steam, 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.

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SECTION VI - HEALTH HAZARD DATA **PHOS DIP - 330** **PAGE TWO**
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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.

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SECTION VII - PRECAUTIONS/PROCEDURES
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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.

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SECTION VIII - SPECIAL PROTECTION
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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.

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SECTION IX - SARA TITLE III INFORMATION
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| HAZARDOUS COMPONENT | CERCLA | SECT 302 | SECT 313 | SECT 311/312 |
|----------------------------|---------|----------|----------|--------------|
| | RQ LBS. | TPQ LBS. | TOXIC | HAZARDS |
| MANGANESE DIHYDROGEN PHOS. | N/A | N/A | YES | A, B |
| NICKEL NITRATE | 100 | N/A | YES | A, B, C |
| NITRIC ACID | 1000 | 1000 | YES | A, B, C |
| PHOSPHORIC ACID | 5000 | N/A | YES | |

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

