
MATERIAL SAFETY DATA SHEET

MSDS NUMBER: M102

MSDS DATE: 6/17/04

PRODUCT NAME: AMYL ACID PHOSPHATE

24 HOUR EMERGENCY PHONE: 1-800-424-9300

I. PRODUCT IDENTIFICATION

HMIS HAZARD RATINGS

HEALTH HAZARD 3

FIRE HAZARD 1

REACTIVITY 0

Based on the National Paint & Coatings Association HMIS rating system.

SARA/TITLE III HAZARD CATEGORIES (See Section X)

Immediate (ACUTE) Health:	YES	Reactive Hazard:	NO
Delayed (Chronic) Health:	NO	Sudden Release of Pressure:	NO
Fire Hazard:	NO		

MANUFACTURER'S :	IsleChem, LLC		
NAME AND :	2801 Long Road	TELEPHONE:	(716) 773-8100
ADDRESS :	Grand Island, NY 14072		

CHEMICAL NAME:	Phosphoric Acid	CAS NUMBER:	2382-76-5 (monoester)
	Monopentyl/Ester		3138-42-9 (diester)
	Dipentyl Ester Mixture		

SYNONYMS/COMMON NAMES: none

CHEMICAL FORMULA: $C_5H_{13}O_4P + C_{10}H_{23}O_4P$

PRODUCT USE: Curing catalyst, oil additive, pigment dispersion agent and others

DOT PROPER SHIPPING NAME: Amyl Acid Phosphate

DOT HAZARD CLASS: 8

DOT IDENTIFICATION NUMBER: UN2819

DOT PACKING GROUP: III

DOT HAZARDOUS SUBSTANCE: Not applicable

DOT MARINE POLLUTANT: Not applicable

ADDITIONAL DESCRIPTION REQUIREMENT: Not applicable

II. HEALTH HAZARD INFORMATION

EMERGENCY AND FIRST AID PROCEDURES

EYES:

OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY THEN SEEK MEDICAL ATTENTION. IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes forcibly holding lids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within one (1) minute is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY.

SKIN:

SEEK MEDICAL ATTENTION IMMEDIATELY. Flush thoroughly with cool water under shower while removing contaminated clothing and shoes. CONTINUE TO FLUSH UNTIL MEDICAL ATTENTION ARRIVES. Discard non-rubber shoes. Wash clothing before reuse.

INHALATION:

Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, administer artificial resuscitation. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION:

DO NOT INDUCE VOMITING. This material is not soluble. DO NOT GIVE FLUIDS. If spontaneous vomiting is inevitable, PREVENT ASPIRATION by keeping the victims head below the knees. GET IMMEDIATE MEDICAL ATTENTION. A qualified physician can perform gastric lavage only when the airway (trachea) has been secured to prevent aspiration.

ROUTES OF EXPOSURE

INHALATION:

Inhalation of vapors, mist or liquid may cause irritation to the mucous membranes of the nose and throat and can produce serious chemical burns.

SKIN:

Exposure to vapor, mist or liquid may irritate skin and can produce serious burns.

EYE CONTACT:

May irritate eyes and can produce chemical burns.

INGESTION:

Can cause irritation and burning of the mouth, throat and gastrointestinal tract.

EFFECTS OF OVEREXPOSURE

ACUTE:

Irritating and corrosive to the eyes, skin, respiratory and digestive tracts.

CHRONIC:

No known chronic effects.

TOXICOLOGY DATA:

Acute Oral LD50 (rat) 3.2 g/kg.

SYNERGISTIC MATERIALS:

Not Applicable.

III. IMPORTANT COMPONENTS

CAS NUMBER / NAME

2382-76-5 Phosphoric acid, monopentyl ester

EXPOSURE LIMITS

PEL: Not established

TLV: Not established

PERCENTAGE

VOL

WT 30-60

COMMON NAMES:

none

Listed On (List Legend Below):

19 23

3138-42-9 Phosphoric acid, dipentyl ester

EXPOSURE LIMITS

PEL: Not Established

TLV: Not Established

PERCENTAGE

VOL

WT 30-60

COMMON NAMES:

none

Listed On (List Legend Below):

19 23

CAS NUMBER / NAME

68391-10-6 Phosphoric acids, pentyl esters

EXPOSURE LIMITS

PEL: Not established

TLV: Not established

PERCENTAGE

VOL

WT 0-20

COMMON NAMES:

none

Listed On (List Legend Below):

19 23

7664-38-2 Phosphoric acid

EXPOSURE LIMITS

PEL: 1 mg/m3, TWA

STEL 3 mg/m3

TLV: 1 mg/m3, TWA

STEL 3 mg/m3

PERCENTAGE

VOL

WT 0-5

COMMON NAMES:

ORTHOPHOSPHORIC ACID

Listed On (List Legend Below):

02 03 04 05 06 07 13 18 21

OTHER CLOTHING AND EQUIPMENT:

Eyewash facility and emergency shower should be in close proximity. Impervious clothing and rubber boots should be worn for splash protection.

VI. PHYSICAL DATA

BOILING POINT @ 760 mm Hg:	125 °C (257 ° F)
FREEZING POINT:	no data
VAPOR PRESSURE:	no Data
SPECIFIC GRAVITY (H₂O=1):	1.07 – 1.085
SOLUBILITY IN H₂O % BY WT:	Insoluble
VAPOR DENSITY (Air=1):	No Data
APPEARANCE AND ODOR:	Colorless to light yellow liquid. Slight Amyl Alcohol odor
ODOR THRESHOLD (ppm):	No Data
pH:	2 @ 10 GM/L
EVAPORATION RATE:	No Data
COEFFICIENT WATER/OIL DISTRIBUTION:	No Data

VII. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY:

Stable under normal conditions. Avoid exposure to heat or to most metals or plastics, especially at elevated temperatures. Thermal degradation occurs above 257 °F.

INCOMPATIBILITY:

Reacts with alkalies producing heat. Reacts with many metals such as Aluminum and Zinc liberating flammable hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal degradation occurs above 257°F, producing oxides of phosphorus.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:

Material is not known to polymerize.

VIII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS:

Store away from heat and separate from alkalis, aluminum, zinc and other metals. Protect from atmospheric moisture. Storage areas for drummed material should have adequate drainage. Storage tanks should be vented and diked. **FOR INDUSTRIAL USE ONLY.**

IX. ENVIRONMENTAL PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Soak up with vermiculite, sand, earth or other absorbent material and place in marked lined steel container for disposal. Neutralize with soda ash. Flush spill area with large quantities of water. Pump large spills into marked containers for disposal or reclamation.

WASTE DISPOSAL METHOD:

Product should be completely removed from container. Material that cannot be used or chemically reprocessed should be disposed of in accordance with all local, state and federal regulations. Incinerate in RCRA permitted equipment designed to handle oxides of phosphorus as combustion products or send to a waste disposal firm. Empty containers should be disposed of in a manner meeting government regulations.

X. ADDITIONAL INFORMATION

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Material Safety Data Sheet available to your employees.

To aid our customers in complying with regulatory requirements, SARA Title III hazard categories for this product are indicated in Section I. If the word "YES" appears next to any category, this product may be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details.

This product contains a toxic chemical or chemicals subject to the reporting requirements of SECTION 313 of TITLE III of the SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 and 40 CFR PART 372. (See Section III, List Legend 02).

XI. PREPARATION INFORMATION

For additional Non-Emergency health, safety or environmental information telephone (716) 773-8438, or write to:

IsleChem, LLC
2801 Long Road
Grand Island, NY 14072

For Emergencies: 24 HOUR EMERGENCY PHONE: 1-800-424-9300

To request an MSDS: 716-773-8438

WARNING LABEL INFORMATION

SIGNAL WORD: DANGER**STATEMENT OF HAZARDS:**

LIQUID CORROSIVE

CAUSES IRRITATION OR BURNS TO THE SKIN, EYES, RESPIRATORY AND DIGESTIVE TRACTS.

PRECAUTIONARY STATEMENTS:

Keep container closed.

Insure adequate ventilation or use an approved respirator.

Avoid breathing vapor.

Do not get in eyes, on skin, on clothing.

Wash thoroughly after handling.

Use goggles, impervious clothing and rubber shoes.

Reacts with aluminum, zinc, and other metals liberating flammable hydrogen gas.

FIRST AID:**FOR EYES:**

OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY THEN SEEK MEDICAL ATTENTION. IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes forcibly holding lids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within one (1) minute is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY.

FOR SKIN:

SEEK MEDICAL ATTENTION IMMEDIATELY. Flush thoroughly with cool water under shower while removing contaminated clothing and shoes. CONTINUE TO FLUSH UNTIL MEDICAL ATTENTION ARRIVES. Discard non-rubber shoes. Wash clothing before reuse.

IF INHALED:

Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. GET MEDICAL ATTENTION IMMEDIATELY.

IF SWALLOWED:

DO NOT INDUCE VOMITING. This material is not soluble. DO NOT GIVE FLUIDS. If spontaneous vomiting is inevitable, PREVENT ASPIRATION by keeping the victims head below the knees. GET IMMEDIATE MEDICAL ATTENTION. A qualified physician can perform gastric lavage only when the airway (trachea) has been secured to prevent aspiration.

IN CASE OF:**SPILL OR LEAK:**

Soak up with vermiculite, sand, earth or other absorbent material and place in marked metal container for disposal. Neutralize with soda ash. Flush spill area with large quantities of water.

FIRE:

Use dry chemical, foam, carbon dioxide or water spray. Use air supplied respirator and full protection equipment. Fire will liberate toxic gases.

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HANDLING AND STORAGE:

Store in a cool, dry place separate from alkalies, aluminum, zinc and other metals.

DISPOSAL:

Product should be completely removed from container. Material that cannot be used or chemically reprocessed should be disposed of in accordance with all local, state and federal regulations. Incinerate in RCRA permitted equipment designed to handle oxides of phosphorus as combustion products or send to a waste disposal firm. Empty containers should also be disposed of in a manner meeting government regulations.

INFORMATION REQUIRED BY FEDERAL, STATE OR LOCAL REGULATIONS:

This product contains:

CAS#	NAME
2382-76-5	Phosphoric acid, monopentyl ether
3138-42-9	Phosphoric acid, dipentyl ester
68391-10-6	Phosphoric acids, pentyl esters
7664-38-2	Phosphoric acid

HMIS RATING SYSTEM: HEALTH 3 FLAMMABILITY 1 REACTIVITY 0

FOR INDUSTRIAL USE ONLY

For additional information, see Material Safety Data Sheet (MSDS) for this product.