
MATERIAL SAFETY DATA SHEET

MSDS NUMBER: M104

MSDS DATE: 09/09/08

PRODUCT NAME: DIMETHYL ACID PYROPHOSPHATE

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

I. PRODUCT IDENTIFICATION

HMIS HAZARD RATINGS

HEALTH HAZARD 3

FIRE HAZARD 1

REACTIVITY 1

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: Dimethyl acid pyrophosphate

CAS NUMBER: 26644-00-8

SYNONYMS/COMMON NAMES: Pyrophosphoric acid, dimethyl ester

CHEMICAL FORMULA: $C_2H_8O_7P_2$

PRODUCT USE: Industrial chemical

DOT PROPER SHIPPING NAME: Corrosive Liquid Acidic Organic NOS (Dimethyl acid pyrophosphate)

DOT HAZARD CLASS: 8

DOT IDENTIFICATION NUMBER: UN 3265

DOT PACKING GROUP: II

DOT HAZARDOUS SUBSTANCE: Not applicable

DOT MARINE POLLUTANT: Not applicable

ADDITIONAL DESCRIPTION REQUIREMENT: Not applicable

CAS = Chemical Abstract Service Number

PEL = OSHA Permissible Exposure Limit

TLV = ACGIH Threshold Limit Value, Current

ND = No relevant information found or not available

CORP = Corporate Exposure Limit

* = See Chronic Effects Information

NA = Not applicable

IMPORTANT: The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY, EXPRESS OR IMPLIED IS MADE REGARDING PERFORMANCE, STABILITY, OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling and storage. Other factors may involve other or additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any Federal, State or local laws.

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) > 2.71 g/kg.

SYNERGISTIC MATERIALS: Not Applicable.

III. IMPORTANT COMPONENTS

CAS NUMBER / NAME

26644-00-8 Pyrophosphoric acid, p,p' dimethyl ester

EXPOSURE LIMITS

PEL: Not established

TLV: Not established

PERCENTAGE

VOL

WT

40-60

COMMON NAMES:

Dimethyl acid pyrophosphate

Listed On (List Legend Below):

00 22 76

CAS NUMBER / NAME

56399-35-0 Pyrophosphoric acid, monomethyl ester

EXPOSURE LIMITS

PEL: Not established

TLV: Not established

PERCENTAGE

VOL

WT

5-20

COMMON NAMES:

Monomethyl acid phosphite

Listed On (List Legend Below):

00 22

CAS NUMBER / NAME

812-00-0 Phosphoric acid, monomethyl ester

EXPOSURE LIMITS

PEL: Not established

TLV: Not established

PERCENTAGE

VOL

WT

10-15

COMMON NAMES:

Monomethyl phosphate

Listed On (List Legend Below):

00 19 22 23 51

813-78-5 Phosphoric acid, dimethyl ester

EXPOSURE LIMITS

PEL: Not Established

TLV: Not Established

PERCENTAGE

VOL

WT

5-15

COMMON NAMES:

Dimethyl phosphate

Listed On (List Legend Below):

00 19 23 36 51

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

1-4

COMMON NAMES:

Orthophosphoric acid

Listed On (List Legend Below):

00 03 12 13 21 22 24 50 51 56 57 58 60 62 64 70 71 72 75 76 77

All components of this product that are required to be on the TSCA Inventory are listed on the inventory.

Not listed as carcinogen - IARC, NTP, OSHA

LIST LEGEND

00	TSCA INVENTORY	56	OSHA PERMISSIBLE EXPOSURE LIM
03	HAS A CERCLA REPORTABLE QTY	57	ACGIH THRESHOLD LIMIT VALUES
12	PA HAZARDOUS SUBSTANCE	58	MASSACHUSETTS RIGHT TO KNOW
13	PA ENVIRONMENTAL HAZ SUBSTANCE	60	CLEAN WATER ACT, SEC 311
19	PA REQUIREMENT 23%	62	WHMIS
21	NJ SPECIAL HEALTH HAZ SUB	64	NIOSH RECOMMENDED EXPOS LIMITS
22	CANADIAN DOMESTIC SUB LIST	70	EUR AGRMT - CARRIAG DANG GOODS
23	NJ REQUIREMENT ≥1%	71	REGS - CARRIAGE OF GOODS/RAIL
24	NJ DISCHARGE OF HAZ SUBSTANCES	72	ANNEX I
36	CANADIAN NDSL	75	AUSTRALIAN INVENTORY (AICS)
50	PHILIPPINES INVENTORY (PICCS)	76	JAPANESE CHEMICAL INVENTORY
51	EINECS	77	KOREAN EXIST. CHEMICALS (ECL)

IV. FIRE AND EXPLOSION DATA

FLASH POINT: (COC) 204° C (399°F)

AUTOIGNITION TEMPERATURE: Not Applicable

FLAMMABLE LIMITS IN AIR, % BY VOLUME - UPPER: Not Applicable

LOWER: Not Applicable

EXTINGUISHING MEDIA:

Use dry chemical, foam, carbon dioxide or water spray.

SPECIAL FIRE FIGHTING PROCEDURES:

In fire conditions wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARD:

Under fire conditions, will liberate toxic and corrosive oxides of phosphorus.

SENSITIVITY TO MECHANICAL IMPACT:

Not Available.

SENSITIVITY TO STATIC DISCHARGE:

Not Available.

V. SPECIAL PROTECTION

VENTILATION REQUIREMENTS:

Provide good general room ventilation plus local exhaust at points of emission.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY:

NIOSH/MSHA approved respirator, following manufacturer's recommendations, should be used as a precautionary measure where airborne contaminants may occur.

EYE:

Wear chemical safety goggles plus full face shield to protect against splashing when appropriate.

GLOVES:

Wear chemical resistant gloves such as neoprene, rubber or vinyl.

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: NA; decomposition starts at 124°C (225°F)

POUR POINT: -60°F

VAPOR PRESSURE: No Data

SPECIFIC GRAVITY (H₂O=1): 1.5

SOLUBILITY IN H₂O % BY WT: Insoluble

VAPOR DENSITY (Air=1): No Data

APPEARANCE AND ODOR: Clear, colorless liquid

ODOR THRESHOLD (ppm): No Data

pH: No data

DENSITY: 13 lb/gal

EVAPORATION RATE: No Data

COEFFICIENT WATER/OIL DISTRIBUTION: No Data

VII. REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY:

Avoid exposure to heat or to most metals or plastics, especially at elevated temperatures. Thermal degradation occurs above 255°F.

VII. REACTIVITY DATA (Continued)

INCOMPATIBILITY:

Reacts with alkalis producing heat. Reacts with many metals liberating flammable hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal degradation occurs above 255°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.

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.

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 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.

HANDLING AND STORAGE:

Store in a cool, dry place separate from alkalis, 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 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
26644-00-8	Pyrophosphoric acid, p,p' dimethyl ester
56399-35-0	Pyrophosphoric acid, monomethyl ester
812-00-0	Phosphoric acid, monomethyl ester
813-78-5	Phosphoric acid, dimethyl ester
7664382	Phosphoric acid

IsleChem

MSDS NUMBER: M104

PRODUCT NAME: DIMETHYL ACID PYROPHOSPHATE

Page 9 of 9

HMIS RATING SYSTEM: HEALTH 3 FLAMMABILITY 1 REACTIVITY 1

FOR INDUSTRIAL USE ONLY

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