
MATERIAL SAFETY DATA SHEET

MSDS NUMBER: M107

MSDS DATE: 6/29/04

PRODUCT NAME: DIMETHYL ACID PYROPHOSPHATE IN ISOBUTANOL

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

I. PRODUCT IDENTIFICATION

HMIS HAZARD RATINGS

HEALTH HAZARD 3

FIRE HAZARD 3

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:	YES	Sudden Release of Pressure:	NO
Fire Hazard:	YES		

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

CHEMICAL NAME:	Dimethyl acid pyrophosphate (solution in isobutanol)	CAS NUMBER:	26644-00-8
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SYNONYMS/COMMON NAMES: Pyrophosphoric acid, dimethyl ester

CHEMICAL FORMULA: $C_2H_8O_7P_2$

PRODUCT USE: Industrial chemical

DOT PROPER SHIPPING NAME: Corrosive Liquids Flammable NOS (dimethyl acid pyrophosphate, isobutanol)

DOT HAZARD CLASS: 8, (3)

DOT IDENTIFICATION NUMBER: UN 2920

DOT PACKING GROUP: II

DOT HAZARDOUS SUBSTANCE: Isobutanol, RQ 5000 lbs.

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 and also dizziness, loss of balance headache and drowsiness.

SKIN:

Exposure to vapor, mist or liquid may irritate skin and can produce serious burns, allergic skin rash and drying, and cracking of the skin.

EYE CONTACT:

May irritate eyes and can produce chemical burns.

INGESTION:

Can cause irritation and burning of the mouth, throat and gastrointestinal tract. May cause headache, dizziness, and drowsiness.

EFFECTS OF OVEREXPOSURE

ACUTE:

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

CHRONIC:

Prolonged skin contact with isobutanol may cause drying and cracking of skin.

TOXICOLOGY DATA:

Not an IARC, NTP or OSHA carcinogen

isobutanol: Oral rat LD50: 2460 mg/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

20-30

COMMON NAMES:

Dimethyl acid pyrophosphate

Listed On (List Legend Below):

00 22

CAS NUMBER / NAME

78—83-1 isobutanol

EXPOSURE LIMITS

PEL: 100 ppm IDLH: 1600 ppm

TLV: 50

PERCENTAGE

VOL

WT

50-60

COMMON NAMES:

Isobutyl alcohol, 2- methyl propanol

Listed On (List Legend Below):

00 01 03 23 51 56 57 58 60 62 64

CAS NUMBER / NAME

56399-35-0 Pyrophosphoric acid, monomethyl ester

EXPOSURE LIMITS

PEL: Not established

TLV: Not established

PERCENTAGE

VOL

WT

3-6

COMMON NAMES:

Monomethyl acid phopshate

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

COMMON NAMES:

Monomethyl phosphate

Listed On (List Legend Below):

00 19 22 23 51

PERCENTAGE

VOL

WT

5-15

813-78-5 Phosphoric acid, dimethyl ester

EXPOSURE LIMITS

PEL: Not Established

TLV: Not Established

COMMON NAMES:

Dimethyl phosphate

Listed On (List Legend Below):

00 19 23 36 51

PERCENTAGE

VOL

WT

3-8

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

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

PERCENTAGE

VOL

WT

1-2

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	01	TSCA 12B 1 TIME EXPORT NOTIFICATION
02	SARA TITLE III Section 313 TOXIC CHEM.	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 111 VOC
19	PA REQUIREMENT ≥3%	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)

VI. PHYSICAL DATA

BOILING POINT @ 760 mm Hg:	NA
POUR POINT:	NA
VAPOR PRESSURE:	No Data
SPECIFIC GRAVITY (H₂O=1):	1.05
SOLUBILITY IN H₂O % BY WT:	Moderate in water
VAPOR DENSITY (Air=1):	Heavier than air
APPEARANCE AND ODOR:	Colorless to faint yellow liquid
ODOR THRESHOLD (ppm):	NA
pH:	<2
DENSITY:	8.76 lb/gal
EVAPORATION RATE:	NA
COEFFICIENT WATER/OIL DISTRIBUTION:	NA

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.

INCOMPATIBILITY:

Reacts with oxidizing agents. Reacts with alkalies 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:

For industrial use only. Store away from heat and separate from alkalis, aluminum, zinc and other metals. Use with adequate ventilation. Keep away from sources of ignition. Ground all equipment. Protect from atmospheric moisture.

Storage areas for drummed material should have adequate drainage. Storage tanks should be vented and diked. Wash thoroughly after handling. Do not pressurize, heat, cut, weld or drill near on or empty containers. Dispose of empty containers properly. Keep container closed when not in use.

IX. ENVIRONMENTAL PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Remove all ignition sources and non-essential personnel. A trained spill team wearing appropriate ppe should stop the release and contain the spill with absorbent material while attempting to stay upwind. Notify appropriate government agencies.

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 properly 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:

CORROSIVE, FLAMMABLE LIQUID

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

PRECAUTIONARY STATEMENTS:

Keep container closed. Keep away from sources of ignition. Insure adequate ventilation or use an approved respirator. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. or ingest. Wash thoroughly after handling. Use goggles, impervious clothing and rubber shoes. Reacts with aluminum, zinc, and other metals liberating flammable hydrogen gas. Ground all equipment. Do not cut or weld on empty container. Dispose of empty container properly.

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:

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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.

PRODUCT NAME: DIMETHYL ACID PYROPHOSPHATE IN ISOBUTANOL

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

Remove all ignition sources and non-essential personnel. A trained spill team wearing appropriate ppe should stop the release and contain the spill with absorbent material while attempting to stay upwind. Notify appropriate government agencies.

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 properly permitted equipment designed to handle oxides of phosphorus as combustion products or send to a waste disposal firm. Do not weld, cut or drill on empty containers. Empty containers should 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
78-83-1	Isobutanol
56399-35-0	Pyrophosphoric acid, monomethyl ester
812-00-0	Phosphoric acid, monomethyl ester
813-78-5	Phosphoric acid, dimethyl ester
7664-38-2	Phosphoric acid

HMIS RATING SYSTEM: HEALTH 3 FLAMMABILITY 3 REACTIVITY 0

FOR INDUSTRIAL USE ONLY

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