
MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS NUMBER: M 103

ISSUE DATE: 1/14/10

PRODUCT NAME: Phenyl Acid Phosphate

Manufacturer's IsleChem, LLC

Name and 2801 Long Road

Address: Grand Island, NY 14072

Telephone: 716-773-8100

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

TO REQUEST AN MSDS: 1-716-773-8438

CUSTOMER SERVICE: 1-716-773-8438

PRODUCT USE: Catalyst for resin manufacture

CHEMICAL NAME: Phenyl phosphate

CHEMICAL FORMULA: C₆H₇O₄P/ C₁₂H₁₁O₄P

SYNONYMS/COMMON NAMES: Phenyl Hydrogen Phosphate

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NUMBER / NAME

701-64-4 Phosphoric acid, monophenyl ester

EXPOSURE LIMITS:

PEL: Not established

ACGIH TLV: Not established

PERCENTAGE

VOL:

WT: 25-50%

COMMON NAMES: Phenyl acid phosphate

Listed On (List Legend Below)

00, 22, 40, 47, 51, 75, 76, 77

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NUMBER / NAME

838-85-7 PHOSPHORIC ACID, DIPHENYL ESTER

EXPOSURE LIMITS:

None established

PERCENTAGE

VOL:

WT: 25-50%

COMMON NAMES: Diphenyl acid phosphate

Listed On (List Legend Below)

00, 22, 40, 47, 51, 75, 76, 77

CAS NUMBER / NAME:

71-36-3 BUTANOL

EXPOSURE LIMITS:

OSHA PEL: 100 ppm

ACGIH TLV: TWA 20 ppm

COMMON NAMES: Butyl Alcohol, n-Butanol

Listed On (List Legend Below)

00, 02, 03, 13, 21, 22, 24, 50, 51, 56, 57, 58, 60, 62

PERCENTAGE

VOL:

WT: 20-30%

CAS NUMBER / NAME:

1623-15-0 PHOSPHORIC ACID, MONOBUTYL ESTER

EXPOSURE LIMITS:

PEL: not established

TLV: not established

COMMON NAMES: Butyl Acid Phosphate

Listed On (List Legend Below)

00, 22, 40, 47, 51, 75, 76, 77

PERCENTAGE

VOL:

WT: 5-15%

CAS NUMBER / NAME:

7664-38-2 PHOSPHORIC ACID

EXPOSURE LIMITS:

PEL: 1 mg/M3

ACGIH TLV: TWA 1 mg/M3 Ceiling 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

PERCENTAGE

VOL:

WT: 0-5%

CAS NUMBER / NAME:

107-66-4 PHOSPHORIC ACID, DIBUTYL ESTER

EXPOSURE LIMITS:

PEL: 1 ppm
ACGIH TLV: TWA 5 mg/M3 (Skin)

PERCENTAGE

VOL:
WT: 0-5%

COMMON NAMES: Dibutyl acid phosphate

Listed On (List Legend Below)

00, 12, 22, 47, 50, 51, 56, 57, 58, 62, 75, 77

CAS NUMBER / NAME:

108-95-2 PHENOL

EXPOSURE LIMITS:

PEL: 5 ppm (Skin designation)
TWA: 5 ppm

PERCENTAGE

VOL:
WT: 0-3%

COMMON NAMES: Phenol

Listed On (List Legend Below)

00, 01, 02, 13, 21, 22, 51

European Risk Phrases: R: 10-20-22-34-41

European Risk Symbols: C (Corrosive), F (Flammable)

List Legend

00 TSCA Inventory	02 SARA Toxic Chemical
03 CERCLA Reportable	12 PA Hazardous substance
13 PA Environmental Haz	21 NJ Special Health Haz
22 Canadian domestic SU	24 NJ Discharge of haz
40 Not PEL/TLV	46 TSCA IUR List Addend.
47 TSCA IUR List	50 Phillipines inventor
51 EINECS	56 OSHA Permissable exp.
57 ACGIH Threshold limit	58 Massachusetts right
60 Clean water act, sec	62 WHIMIS
75 Australian inventory	76 Japanese chemical in
77 Korean exist. chemic	01 SARA Extremely haz. Sub., section 302

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER. CORROSIVE. COMBUSTIBLE LIQUID. CONTACT WITH THIS MATERIAL SHOULD BE AVOIDED. EYE CONTACT WITH LIQUID CAN RESULT IN BURNS. LIQUID OR VAPORS MAY BE IRRITATING OR CORROSIVE TO SKIN, GASTROINTESTINAL AND RESPIRATORY TRACTS. KEEP AWAY FROM SOURCES OF IGNITION.
Clear colorless liquid slightly more viscous than water.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Ingestion, inhalation, skin, eyes.

TARGET ORGANS: None known.

IRRITANCY: Severely irritating to eyes.

SENSITIZING CAPABILITY: None known.

REPRODUCTIVE EFFECTS: None known.

CANCER INFORMATION: None known.

SHORT TERM EXPOSURE (ACUTE)

INHALATION: Irritating to mucous membranes. May be harmful by inhalation.

EYES: Liquid is a severe eye irritant and can cause burns.

SKIN: May be irritating.

INGESTION: May cause burns to gastrointestinal tract. May be harmful by ingestion.

REPEATED EXPOSURE (CHRONIC)

None known.

SYNERGISTIC MATERIALS: None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

4. FIRST AID MEASURES

EYES: IMMEDIATELY FLUSH EYES WITH A DIRECTED STREAM OF WATER for at least 15minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN: Flush thoroughly with cool water under shower while removing contaminated clothing and shoes. Discard non-rubber shoes. Wash clothing before reuse. GET MEDICAL ATTENTION AS SOON AS POSSIBLE.

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

INGESTION: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

5. FIRE FIGHTING MEASURES

Flash Point: 132 °F (closed cup)

Autoignition Temperature: Not available

Method: Not available

Flammable Limits In Air, By % Volume

Upper: Not available

Lower: Not available

EXTINGUISHING MEDIA: Dry chemical, alcohol foam, carbon dioxide.

FIRE FIGHTING PROCEDURES: Keep unauthorized personnel removed and upwind. Wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

FIRE AND EXPLOSION HAZARD: COMBUSTIBLE LIQUID.

SPECIAL PROTECTIVE EQUIPMENT: Not applicable.

HAZARDOUS DECOMPOSITION PRODUCTS UNDER FIRES CONDITIONS:

Oxides of carbon and phosphorus

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Eliminate all sources of ignition. Follow protective measures provided under Personal Protection in Section 8.

ENVIRONMENTAL PRECAUTIONS: Contain spill with dike to prevent entry into sewers or waterways. Spills or releases should be reported, if required, to the appropriate local, state and federal agencies.

METHODS FOR CLEANING UP: Sweep or vacuum spills and place in containers for recovery or disposal.

7. HANDLING AND STORAGE

HANDLING: Ground all equipment. Avoid breathing mist or vapor, use with adequate ventilation. Wear NIOSH/MSHA approved respiratory protection if there is potential for exposure above the exposure limits.

SPECIAL MIXING AND HANDLING INSTRUCTIONS: Keep away from sources of ignition. The vapors can travel to an ignition source and flash back causing a flash fire.

STORAGE: Keep container tightly closed and properly labeled. Store in a cool dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: There are no occupational exposure limits established at this time. Since this material may be irritating to skin and mucous membranes, general room ventilation plus local exhaust at points of emission should be used to maintain levels of airborne contaminants as low as feasibly possible.

PERSONAL PROTECTION

RESPIRATORY: Wear a NIOSH/MSHA approved respirator following manufacturer's recommendations, where airborne contaminants may occur.

EYE/FACE: Wear safety glasses with side shields or chemical safety goggles and a face shield as appropriate (ANSI Z87.1).

SKIN: Contact should be prevented by use of appropriate personal protective clothing. Wear chemical resistant gloves such as rubber, neoprene or vinyl.

OTHER: Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Clear colorless liquid slightly thicker than water

Odor Threshold: Not available

Specific Gravity (H₂O = 1): 1.14 g/ml

Vapor Pressure: Not available

% Volatiles by Vol.: approximately 25%

Flash Point: 132 °F

Boiling Point @ 760 mm Hg: Not available

Melting Point: Not available

Solubility in Water: approx. 1%

pH: 0

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: STABLE UNSTABLE

REACTS WITH:

<input type="checkbox"/> AIR	<input checked="" type="checkbox"/> STRONG OXIDIZERS	<input type="checkbox"/> ACIDS
<input type="checkbox"/> WATER	<input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> ALKALIS
<input type="checkbox"/> HEAT	<input type="checkbox"/> NONE	

COMMENTS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide & carbon dioxide; Phosphorus oxides

HAZARDOUS POLYMERIZATION: OCCURS WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Phenyl Acid Phosphate Product

ACUTE DERMAL: LD50 > 2000 mg/kg (rat)

ACUTE ORAL TOXICITY: LD50: 2020 mg/kg (rat)

CHRONIC TOXICITY: This product does not contain any substances that are considered by OSHA, NTP, IARC or AGCIH to be "probable" or "suspected" carcinogens.

TOXICOLOGICAL INFORMATION AND INTERPRETATION: Mutagenicity; Ames test, negative; Mouse lymphoma, negative

12. ECOLOGICAL INFORMATION

Data not available.

13. DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.

14. TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME:	CORROSIVE LIQUIDS, FLAMMABLE n.o.s. (Phenyl acid phosphate, n-Butanol)
DOT HAZARD CLASS:	8 (3)
DOT IDENTIFICATION NUMBER:	UN2920
DOT PACKING GROUP:	II
DOT HAZARDOUS SUBSTANCE(S):	RQ 5000 lbs. (n-butanol, phosphoric acid) RQ 1000 lbs (Phenol)
DOT MARINE POLLUTANT(S):	Not applicable

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: 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.

Phenol and Butanol are listed as Toxic Chemicals requiring Toxic Chemical Release Reporting under SARA Sec. 313. Refer to the regulations for applicability and requirements.

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

TSCA: All components contained in this substance are listed on the TSCA inventory.

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 and 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, rules, regulations or ordinances.

17. WARNING LABEL INFORMATION

SIGNAL WORD: DANGER

HAZARD WARNINGS: Flash Point: 132 °F . COMBUSTIBLE LIQUID. EYE CONTACT WITH LIQUID CAN RESULT IN BURNS. LIQUID OR VAPORS MAY BE IRRITATING TO SKIN, GASTROINTESTINAL AND RESPIRATORY TRACTS.

PRECAUTIONS: .. Avoid breathing vapors or mist. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Ground all equipment. Keep away from sources of ignition. The vapors can travel to an ignition source and flash back causing a flash fire. Before using, read Material Safety Data Sheet (MSDS) for this material.

FIRST AID

EYES: IMMEDIATELY FLUSH EYES WITH A DIRECTED STREAM OF WATER for at least 15minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN: Flush thoroughly with cool water under shower while removing contaminated clothing and shoes. Discard non-rubber shoes. Wash clothing before reuse. GET MEDICAL ATTENTION AS SOON AS POSSIBLE.

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

INGESTION: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

IN CASE OF SPILL OR LEAK: Sweep or vacuum spills and place in containers for recovery or disposal.

FIRE: Water, dry chemical, Halon, alcohol foam, carbon dioxide.

HANDLING AND STORAGE: Keep away from sources of ignition. The vapors can travel to an

ignition source and flash back causing a flash fire. Avoid breathing airborne particulates; wear respiratory protection when exposure is possible. Use good housekeeping practices. Keep container tightly closed and properly labeled. Store in a cool dry area.

DISPOSAL: Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.

This Product Contains:

CAS#	NAME
701-64-4	PHOSPHORIC ACID, MONOPHENYL ESTER
838-85-7	PHOSPHORIC ACID, DIPHENYL ESTER
71-36-3	n-BUTANOL
1623-15-0	PHOSPHORIC ACID, MONOBUTYL ESTER
7664-38-2	PHOSPHORIC ACID
107-66-4	PHOSPHORIC ACID, DIBUTYL ESTER
108-95-2	PHENOL

HMIS RATING: HEALTH: 3 FIRE: 2 REACTIVITY: 0
FOR INDUSTRIAL USE ONLY

For additional information see the material safety data sheet (MSDS) for this product.