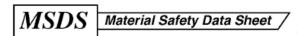
MSDS Number: P4270 * * * * * Effective Date: 11/17/99 * * * * * Supercedes: 12/08/96



From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300

OTIEMTNEO: 1-000-424-9000

National Response in Canada CANUTEC: 613-996-6666

Outside U.S. and Canada Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

PHTHALIC ACID

1. Product Identification

Synonyms: 1, 2-Benzenedicarboxylic acid; o-dicarboxybenzene

CAS No.: 88-99-3

Molecular Weight: 166.14 Chemical Formula: C6H4(C00H)2 Product Codes: Product Codes: 2668

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous	
Phthalic Acid	88-99-3	100%	Yes	

3. Hazards Identification

Emergency Overview

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Potential Health Effects

Inhalation:

May cause irritation to the respiratory tract. Symptoms may include coughing, sore throat, labored breathing, and chest pain.

Ingestion:

No information found, but compound should be handled as a potential health hazard.

Skin Contact:

May cause irritation with redness and pain.

Eve Contact:

May cause irritation, redness and pain.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Call a physician if irritation develops.

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician if irritation persists.

5. Fire Fighting Measures

Fire:

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. The anhydride of this material is a dust explosion hazard.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White crystals.

Odor:

No information found.

Solubility:

1 g dissolves in 160 mL of water

Specific Gravity:

1.59

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

No information found.

Melting Point:

230C (446F) Forms anhydride and water

Vapor Density (Air=1):

5.73

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Phthalic anhydride, carbon oxides.

Hazardous Polymerization:

Will not occur.

In compatibilities:

Oxidizers, sodium nitrate, sodium nitrite, nitric acid.

Conditions to Avoid:

Heat, incompatibles.

11. Toxicological Information

Rat (unspecified route) LD50: 1100 mg/kg; oral mouse LD50: 2530 mg/kg

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

\Chemical Inventory Status - Part Ingredient	·			Japan	Australia
Phthalic Acid (88-99-3)		Yes	Yes	Yes	Yes
\Chemical Inventory Status - Part	2\			nada	
Ingredient		Korea	DSL	NDSL	Phil.
Phthalic Acid (88-99-3)		Yes	Yes	No	Yes
\Federal, State & International Ro	-SARA	302-		SAR	A 313
Ingredient	RQ 	TPQ	Lis	t Che	mical Catg.
Phthalic Acid (88-99-3)	No	No	No		No
\Federal, State & International Re	_	rulations - Part 2\		SCA-	
Phthalic Acid (88-99-3)	No	-	No No		0

Chemical Weapons Convention: No TSCA 12(b): No SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No (Pure / Solid) Reactivity: No

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 1 Flammability: 1 Reactivity: 1

Label Hazard Warning:

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Label Precautions:

Avoid breathing dust.

Avoid contact with eyes, skin and clothing.

Keep container closed.

Use with adequate ventilation. Wash thoroughly after handling.

Label First Aid:

In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. Call a physician if irritation develops or persists. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.

Product Use:

Laboratory Reagent.
Revision Information:
No changes.

Disclaimer:

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Prepared by: Environmental Health & Safety Phone Number: (314) 654-1600 (U.S.A.)