
DIMETHYL PHTHALATE, 99%

1. Chemical Product And Company Identification

Company's Name: REAGENTS, INC.

Company's P. O. Box: 240746

Company's City: CHARLOTTE

Company's State: NC

Company's Country: US

Company's Zip Code: 28224

Company's Info Ph #: 704/554-7474, 800/732-8484

Emergencies, call CHEMTREC: 800-424-9300

Date MSDS Prepared: April 30, 2003

Synonyms: 1,2-Benzenedicarboxylic acid, dimethyl ester; D.M.P.; Phthalic acid, dimethyl ester; Methyl phthalate

CAS No.: 131-11-3

Molecular Weight: 194.19

Chemical Formula: C₆H₄(CH₃OOC)₂

Product Codes: 600131, 2-19660-RB

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Dimethyl Phthalate	131-11-3	90 - 100%	Yes

3. Hazards Identification

Emergency Overview

WARNING! HARMFUL IF SWALLOWED OR INHALED. VAPOR OR MIST IS IRRITATING TO THE EYES AND UPPER RESPIRATORY TRACT. MAY CAUSE IRRITATION TO SKIN.

Health Rating: 1 - Slight

Flammability Rating: 1 - Slight

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT

Storage Color Code: Green (General Storage)

Potential Health Effects

Due to low water solubility and relatively high lipid solubility, DMP is able to accumulate in body tissues. As a result, chronic exposure tends to be more important than acute exposure.

Inhalation: *Toxic. Inhalation of vapors irritates the respiratory tract. Symptoms may include coughing, shortness of breath and chest pain. At room temperature the substance has such a low vapor pressure that inhalation of the vapor is unlikely.*

Ingestion: *Swallowing can cause burning sensation of lips, tongue, mouth; vomiting and diarrhea may occur. Central nervous system effects, including coma, are possible.*

Skin Contact: *May cause irritation with redness and pain.*

Eye Contact: *Causes irritation, redness, and pain.*

Chronic Exposure: *May accumulate in body tissues. May affect central nervous system.*

Aggravation of Pre-existing Conditions: *No information found.*

4. First Aid Measures

Inhalation: *Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.*

Ingestion: *Induce vomiting immediately as directed by medical personnel. 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. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.*

Eye Contact: *Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.*

5. Fire Fighting Measures

Fire: *Flash point: 146°C (295°F) CC*

Autoignition temperature: 490°C (914°F)

Flammable limits in air % by volume: LEL: 0.9 UEL: 8.0

Slight fire hazard when exposed to heat or flame.

Explosion: *Above the flash point, explosive vapor-air mixtures may be formed.*

Fire Extinguishing Media: *Water spray, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep fire-exposed containers cool. Water or foam may cause frothing.*

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

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel

from entering. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

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

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL): 5 mg/m³ (TWA)

-ACGIH Threshold Limit Value (TLV): 5 mg/m³ (TWA)

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. 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): If the exposure limit is exceeded, a half-face respirator with an organic vapor cartridge and particulate filter (NIOSH type P95 or R95 filter) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece respirator with an organic vapor cartridge and particulate filter (NIOSH P100 or R100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. Please note that N series filters are not recommended for this material. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. This compound possibly exists in both particulate and vapor phase. A gas/vapor cartridge should be used in addition to the particulate filter (NIOSH type P95 or better filter). If the vapor concentration alone exceeds the exposure limits, use a supplied air respirator, because warning properties are unknown for these compounds. Breathing air quality must meet the requirements of the OSHA respiratory protection standard (29CFR1910.134).

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Clear oily liquid.

Odor: Slight aromatic odor.

Solubility: 0.4% in water @ 32°C (90°F)

Specific Gravity: 1.19 @ 20°C/20°C

pH: No information found.

% Volatiles by volume @ 21°C (70°F): 100

Boiling Point: 282°C (540°F)

Melting Point: 5.5°C (43°F)

Vapor Density (Air=1): 6.69

Vapor Pressure (mm Hg): 1 @ 100.3°C (212°F)

Evaporation Rate (BuAc=1): ca. 0

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong acids or bases, nitrates, and strong oxidizing agents.

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Oral rat LD₅₀: 6800 mg/Kg; skin rabbit LD₅₀: > 20 mL/kg. Investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----

---NTP Carcinogen---

Ingredient	Known	Anticipated	IARC Category
Dimethyl Phthalate (131-11-3)	No	No	None

12. Ecological Information

Environmental Fate: When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material may leach into groundwater. When released into water, this material may biodegrade to a moderate extent. This material has an experimentally-determined bioconcentration factor (BCF) of less than 100. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction

with photochemically produced hydroxyl radicals.

Environmental Toxicity: This material is expected to be slightly toxic to aquatic life.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA-approved waste 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 1\-----
 Ingredient TSCA EC Japan Australia

 Dimethyl Phthalate (131-11-3) Yes Yes Yes Yes

-----\Chemical Inventory Status - Part 2\-----

 Ingredient Korea DSL NDSL Phil.

 Dimethyl Phthalate (131-11-3) Yes Yes No Yes

-----\Federal, State & International Regulations - Part 1\-----

 Ingredient -SARA 302- -SARA 313-----
 RQ TPQ List Chemical Catg.

 Dimethyl Phthalate (131-11-3) No No Yes No

-----\Federal, State & International Regulations - Part 2\-----

 Ingredient CERCLA 261.33 8(d)

 Dimethyl Phthalate (131-11-3) 5000 U102 No

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

Reactivity: No (Pure / Liquid)

WHMIS: 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: 2 Flammability: 1 Reactivity: 0

Label Hazard Warning: WARNING! HARMFUL IF SWALLOWED OR INHALED. VAPOR OR MIST IS IRRITATING TO THE EYES AND UPPER RESPIRATORY TRACT. MAY CAUSE IRRITATION TO SKIN.

Label Precautions:

Avoid breathing vapor or mist.

Avoid contact with eyes, skin and clothing.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

Label First Aid: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. In case of contact, immediately flush skin with plenty of water for at least 15 minutes. In all cases, get medical attention.

Product Use: Laboratory Reagent.

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