

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Dimethyl Phthalate
CAS number	131-11-3
Synonyms	DMP; Dimethyl 1,2-benzenedicarboxylate

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Warning

Hazard statements

H242: Heating may cause a fire
H302: Harmful if swallowed
H314: Causes severe skin burns and eye damage
H317: May cause an allergic skin reaction
H411: Toxic to aquatic life with long lasting effects

Precautionary statements

P210: Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking.
P234: Keep only in original container.
P235: Keep cool.
P240: Ground/bond container and receiving equipment.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash hands [and ...] thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
P301 + P317 + P330 + P331: IF SWALLOWED: Get emergency medical help. Rinse mouth. Do NOT induce vomiting.
P302 + P352 + P354 + P361: IF ON SKIN: Wash with plenty of water. Immediately rinse with water for several minutes. Take off immediately all contaminated clothing.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P354 + P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316: Get emergency medical help immediately.
P321: Specific treatment (see ... on this label).
P330: Rinse mouth.
P333 + P317: If skin irritation or rash occurs: Get emergency medical help.
P362 + P364: Take off contaminated clothing and wash it before reuse.
P363: Wash contaminated clothing before reuse.
P370 + P378: In case of fire: Use Water spray, Carbon dioxide (CO 2), Dry chemical, Chemical foam to extinguish.
P391: Collect spillage.
P403: Store in a well-ventilated place.
P405: Store locked up.
P410: Protect from sunlight.
P420: Store separately.
P501: Dispose of contents/container to local and federal regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Dimethyl phthalate	DMP; Dimethyl 1,2-benzenedicarboxylate	131-11-3	>=99%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Do NOT induce vomiting. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Dry chemical. Water mist may be used to cool closed containers. Chemical foam.
Unsuitable extinguishing media	No information available.

5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point 150 °C / 302 °F

Autoignition Temperature 460 °C / 860 °F

Explosion limits

Upper 8.00%

Lower 0.9% @ 180°C

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
1	1	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required.

6.2 Environmental precautions

See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Prevent product from entering drains. Keep in suitable, closed containers for disposal. Do not flush into surface water or sanitary sewer system.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Ensure adequate ventilation. Wear personal protective equipment/face protection.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities**Storage conditions**

Keep in a dry, cool, and well-ventilated place. Keep container tightly closed.

Incompatibilities

Acids. Bases.

SECTION 8: Exposure controls/personal protection**8.1 Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Component	Type	Value
Dimethyl phthalate	(Vacated) TWA	5 mg/m3
	TWA	5 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Dimethyl phthalate	TWA	5 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Dimethyl phthalate	IDLH	2000 mg/m3
	TWA	5 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls**Appropriate engineering controls**

None under normal use conditions.

Personal protective equipment**Eye/face protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

No protective equipment is needed under normal use conditions.
Recommended Filter type: Particle filter.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	Aromatic
Odor Threshold	No information available
pH	Not applicable
Melting Point/Range	2 °C / 35.6 °F
Boiling Point/Range	282 °C / 539.6 °F
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	8.00%
Lower	0.9% @ 180°C
Vapor Pressure	0.008 mbar @ 20 °C
Vapor Density	6.69
Density	1.19 g/cm ³ at 25°C
Solubility	Negligible
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	460 °C / 860 °F
Decomposition Temp	No information available
Viscosity	17 mPa.s at 20 °C
Molecular Formula	C ₁₀ H ₁₀ O ₄
Molecular Weight	194.19 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products.

10.5 Incompatible materials

Acids, Bases.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dimethyl phthalate	6800 mg/kg (Rat)	>12000 mg/kg (Rabbit)	-

Skin corrosion/irritation

May cause irritation.

Serious eye damage/eye irritation

May cause irritation.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
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Dimethyl phthalate	131-11-3	Not listed	Not listed	Not listed	Not listed	Not listed
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Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Product		Species	Test Results
Dimethyl phthalate	EC50	Pseudokirchneriella subcapitata	20.6 - 45.8 mg/L, 96h 28.4 - 71 mg/L, 72h 142 mg/L, 96h static
	EC50	Desmodesmus subspicatus	204 mg/L, 72h
	LC50	Oncorhynchus mykiss	56 mg/L, 96h flow-through
	LC50	Lepomis macrochirus	49.5 mg/L, 96h 37 - 69 mg/L, 96h static
	LC50	Pimephales promelas	121 mg/L, 96h static 39 mg/L, 96h flow-through
	EC50	Microtox	16.0 mg/L, 5 min 18.0 mg/L, 15 min 18.0 mg/L, 30 min 4100 mg/L, 30 min > 2000 mg/L, 17h
	EC50	Daphnia magna	33 mg/L, 48h

12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Dimethyl phthalate - 131-11-3	U102	-

SECTION 14: Transport information

DOT (US)

UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class	9
Packing Group	III
Technical Name	(Dimethyl phthalate)

IMDG Not regulated.

IATA Not regulated.

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed, Dimethyl phthalate (CAS #131-11-3), RQ: 5000 lb.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Listed, Dimethyl phthalate (CAS #131-11-3).

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Listed, Dimethyl phthalate (CAS #131-11-3).

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA)

Listed, Dimethyl phthalate (CAS #131-11-3).

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed, Dimethyl phthalate (CAS #131-11-3).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Dimethyl phthalate (CAS #131-11-3).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Dimethyl phthalate (CAS #131-11-3).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 07/30/2018

Revision 1: 02/28/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.