

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.0

Revision: 10/02/2023

Trade Name: HERMETIC™ Methyl Methacrylate (MMA) - BPO - Hardener Powder – Part B

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

1.1 Product identifier

Trade Name: HERMETIC™ Methyl Methacrylate (MMA) - BPO - Hardener Powder - Part B

1.2 Synonyms : Dibenzoyl Peroxide, powder, 50% with dicyclohexyl phthalate

1.3 Details of the supplier of the Safety Data Sheet Manufacturer:

Elite Crete Systems
1151 Transport Drive
Valparaiso, IN 46383
Toll Free: 888.323.4445
Tel: (219) 465-7671
www.elitecrete.com

1.4 Emergency telephone number:

CHEMTREC US DOMESTIC: (800-424-9300)
CHEMTREC INTERNATIONAL: (703-527-3887)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 and GHS:

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H361fd, H411.

The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU.

POTENTIAL HEALTH EFFECTS:

Skin and eye contact are the primary routes of exposure to this product.

Dust may be irritating to the respiratory tract and cause symptoms of bronchitis

May Cause sensitization by skin contact

This product has a low order of toxicity. No significant toxic effects are expected

DANGER!



H226 May cause fire



GHS07 exclamation mark

Acute Tox. 2; H302: Harmful if swallowed.

Skin Sensitization 1; H317: May cause an allergic skin reaction. STOT SE 3; H335: May cause respiratory irritation.

CARCINOGENICITY

OSHA: No

ACGIH: No

NTP: No

IARC: No

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3 Composition/information on ingredients

3.2 Mixture.

Description: Mixture of substances listed below with nonhazardous additives.

Hazardous components:

Identification #	Description	WT. %
CAS: 000094-36-0	DIBENZOYL PEROXIDE	< 49-51%
CAS: 000084-61-7	DICYCLOHEXYL PHTHALATE	40 - 50%

4 First aid measures

4.1 Description of first aid measures

After inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing difficulty continues.

After skin contact:

Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Remove contaminated clothing. Launder contaminated clothing before re-use.

After eye contact:

If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention.

After swallowing:

If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or MSDS with the victim to the health professional.

4.2 Most important symptoms and effects, both acute and delayed.

Acute: This material may cause irritation to skin and eyes. Product may cause an allergic skin reaction.

Chronic: Prolonged or repeated skin contact may cause allergic skin reaction or dermatitis.

Target Organs: **Acute:** Eye, Skin **Chronic:** Skin

Hazards: Pre-existing skin or eye problems may be aggravated by exposure to this product.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptoms and reduce over-exposure.

5 Firefighting measures

FLAMMABILITY: Decomposition products may be flammable

FLASH POINT: N/A

AUTOIGNITION TEMPERATURE: N/A

NFPA HAZARD CLASSIFICATION:

HEALTH: 2

FLAMMABILITY: 3

REACTIVITY: 3

HMIS HAZARD CLASSIFICATION:

HEALTH: 2

FLAMMABILITY: 3

REACTIVITY: 3

PROTECTION: 0

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EXTINGUISHING MEDIA: WATER SPRAY, FOAM, SAND, DRY CHEMICAL POWDER, CO₂

SPECIAL FIREFIGHTING PROCEDURES: Evacuate all non-essential personnel. Extinguish a small fire with powder or carbon dioxide then apply water to prevent reignition. Cool closed containers with water. Water used to extinguish a fire should not be allowed to enter the drainage system or water courses. After a fire, ventilate thoroughly the area and soak with water, clean the walls and metallic surfaces.

UNUSUAL FIRE AND EXPLOSION HAZARDS: CAUTION: reignition may occur! Decomposition under effect of heating. If involved in a fire, it will support combustion. Dust explosion hazard. Vapors may form explosive mixtures with air. In case of fire and/or explosion, do not breath fumes.

HAZARDOUS DECOMPOSITION PRODUCTS: CO₂, Carbon monoxide, Benzoic Acid, Benzene

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Personnel should be trained for spill response operations.

6.2 Environmental precautions: All work practices must be aimed at eliminating environmental contamination.

6.3 Methods and material for containment and cleaning up: Evacuate area. Contain spill if safe to do so. Prevent entry into drains, sewers, and other waterways. Soak up spilled material with an absorbent material and pick up and place in an appropriate waste container for disposal. Do not mix with other wastes. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

7 Handling and storage

7.1 Precautions for safe handling

Keep away from ALL sources of ignition-NO smoking. Flammable liquid

Explosive mixtures may occur at temperatures at or above flashpoint. Take action to prevent static discharges. Fire fighting must be carried out at a safe distance. Cool endangered containers with water

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store between 10 and 32 0C (45 - 90°F) and avoid contact with skin and eyes. Keep away from all sources of ignition. Keep away from heat, fire, sparks, and static sources of possible ignition. Ground all transfer equipment. Good general housekeeping procedure should be followed. Do not eat drink or smoke while using the material. Emergency showers should be readily available. Material may partially freeze in cold temperatures which will result in crystals and haziness. If this occurs rewarm and homogenize. Avoid contact with skin eyes. Vapors may irritate eyes and will irritate the skin. Use only with good ventilation and PPE. Keep container closed when not in use.

7.3 Specific end use(s): No information

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8 Exposure controls/personal protection

Additional information about design of technical facilities:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.
 Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory protection: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

Protection of hands: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

Protective gloves

Material of gloves:

The selection of suitable gloves does not only depend on the material, but also on the quality, and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be determined by the manufacturer of the protective gloves. DO NOT exceed the breakthrough time set by the Manufacturer.



Eye protection: Tightly fitting Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

Tightly sealed goggles

Body Protection:

Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:

White powder with faint odor

Color:

white

Odor:

Faint odor

Odor threshold:

Not Available

pH-value:

Not determined

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Change in condition	
freezing point:	N/A
Boiling point/Boiling range:	N/A decomposes
Flash point:	N/A
Flammability (solid, gaseous):	No data available
Auto/Self-ignition temperature:	Not classified as self heating
Decomposition temperature:	Decomposition under effect of heating
Self-igniting:	Not classified as self heating
Danger of explosion:	See section 5
Melting Point:	Decomposes prior to melting
Vapor pressure at 25 °C:	N/A
Density at 20°C:	10.24 lbs. per gallon,
Relative density:	No data available
Vapor density:	68°F 20°C
Evaporation rate:	N/A
Solubility in / Miscibility with Water:	Insoluble @ 68°F/20°C
Specific Gravity 20°C: (Water = 1):	1.23
Viscosity:	
Dynamic:	N/A
Kinematic:	N/A
Solvent content:	No data available
Organic solvents:	No data available
VOC (EC)	No data available
9.2 Other information	

10 Stability and reactivity

10.1 Reactivity no data available

10.2 Chemical stability SADT: (Self accelerating decomposition temperature) is the lowest temperature as which self-accelerating decomposition may occur with a substance in the packaging used in transport. A dangerous self-accelerating decomposition reaction and under certain circumstances, explosion or fire can be caused by thermal decomposition at the above the following temperature: 131°F/55°C. Contact with incompatible substances can cause decomposition at or below the SADT 131°F/55°C. **Thermal decomposition / conditions to be avoided:** When heated to decomposition this product produces noxious gases such as CO, CO₂, hydrocarbons and soot. And can explode

10.3 Hazardous Polymerization: Polymerization does not occur

10.4 Conditions to avoid (STABILITY): store at or below 77° F/ 25°C. avoid shock or friction, confinement must be avoided

10.5 Incompatible materials to avoid: Avoid contact with rust, iron, copper. Contact with incompatible materials such as acids, alkalis, heavy metals, and reducing agents will result in hazardous decomposition. Do not mix with peroxide accelerators. Use only stainless steel 316, PVC, polyethylene or glass lined equipment.

10.6 Hazardous decomposition products: Will not occur when used as directed

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11 Toxicological information

11.1 Information on toxicological effects: No experimental toxicological data on the preparation as such available. The Following data are applicable to the ingredient(s) listed below.

Dibenzoyl peroxide, 78%

Acute toxicity: Oral LD50

Rat >5000 mg/kg

Inhalation LC50

Rat > 24.3 mg/l; 4 hrs. exposure time max. attainable concentration.

Irritation:

Skin: NON IRRITATING (4 HOURS EXPOSURE TIME)

EYE: Moderately irritating

Sensitization: Sensitization possible by skin contact.

Genotoxicity: Ames test; No mutagenic

Reproductive toxicity information:

No information concerning the effects of this product and its components on the human reproduction system.

12 Ecological information

12.1 No experimental ecological data are available on the preparation as such. The following data are applicable to the ingredient(s) listed below.

Dibenzoyl peroxide 78%

Ecotoxicity:

Fish: acute toxicity, 96-LC50 = 2.0mg/l. (poecilia reticulata.)

Daphnia: 48 h EC50: 2.91mg/l

Bacteria: activated sludge respiration inhibition test EC50 = 35 mg/l

Fate

Degradation biotic: readily biodegradable (closed bottle test)

13 Disposal considerations

13.1 Waste treatment methods

Recommendations:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

RCRA WASTE CODE: None Listed

EU WASTE CODE: Not Listed

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14 Transport information

14.1 UN-Number	UN 3106
DOT: CAN:ADN: ADR: IATA:	Organic Peroxide Type D, Solid (Dibenzoyl peroxide, 50%)
CLASS:	5.2
PACKING GROUP	II
LABEL STATEMENT	Organic peroxide
TREM-Card or ERG number:	145

This product does not contain an environmentally hazardous substance per 49 CFR 172.101, Appendix A



14.2 WATER TRANSPORTATION

UN proper shipping name	Organic Peroxide Type D, Solid (Dibenzoyl peroxide, 50%)
UN-Number	Un 3106
CLASS	5.2
PACKING GROUP	II
LABEL STATEMENTS :	Organic peroxide
EMs CODE	F-J, S-R
MARINE POLLUTANT	No



14.5 AIR TRANSPORTATION

PROPER SHIPPING NAME	Organic Peroxide Type D, Solid (Dibenzoyl peroxide, 50%)
HAZARD CLASS:	5.2
ID NUMBER	UN 3106
PACKING GROUP:	II
LABEL STATEMENT	Organic Peroxide



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15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. United States (USA)

Product and or components listed below are subject of the following:

Dibenzoyl peroxide

Massachusetts Substance List	yes
New Jersey R-T-K Hazard. Sub.	yes
PENN. Hazardous Substance List	yes
SARA Title III, Section 313	yes
Toxic Subst. Cont. Act-Listed	yes
Domestic Substance List Canada	yes

Dicyclohexyl phthalate

Toxic Substance Cont. Act-listed	yes
Domestic Substance list Canada	yes

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

- H312: Harmful in contact with skin
- H317: May cause an allergic skin reaction
- H412: Harmful to aquatic life with long lasting effects
- R21: Harmful in contact with skin
- R34: Causes burns
- R43: May cause sensitization by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Abbreviations and acronyms:

- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation.
- IATA: International Air Transport Association.
- ACGIH: American Conference of Governmental Industrial Hygienists.
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- ELINCS: European List of Notified Chemical Substances.
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- NFPA: National Fire Protection Association (USA).
- HMIS: Hazardous Materials Identification System (USA).
- LC50: Lethal concentration, 50 percent.
- LD50: Lethal dose, 50 percent.