

SAFETY DATA SHEET

MH-1 HARDENER

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MH-1 HARDENER

PRODUCT CODE: #MH-1

PRODUCT USE: Hardener component for Methacrylate based coating products.

MANUFACTURER

DUDICK, INC.
1818 MILLER PARKWAY
STREETSBORO, OH, 44241
330-562-1970

24 HR. EMERGENCY TELEPHONE NUMBER

CHEM-TEL (US Transportation): (800)255-3924

CHEM-TEL (International Transportation): +01(813)248-0585

2. HAZARDS IDENTIFICATION

CLASSIFICATION:

Specific target organ toxicity - single exposure - Respiratory tract irritation - Category 3

Skin Sensitizer - Category 1B

Skin Irritant - Category 2

Organic Peroxides - Type D

Serious Eye Damage/Eye Irritation - Category 2

GHS LABEL ELEMENTS:



SIGNAL WORD: Danger

HAZARD STATEMENTS:

H242 Heating may cause a fire

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

PRECAUTIONARY STATEMENTS :

P403+P235 Store in a well-ventilated place. Keep cool.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P501 Dispose of contents/container in accordance with local, regional, and federal regulations.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P234 Keep only in original container.

P261 Avoid breathing vapors/spray.

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P264 Wash all contacted body parts thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P220 Keep/Store away from clothing/combustible materials.
Store at temperatures not exceeding 27°C/80°F. Keep cool.

3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	Weight %	CAS Number
Benzoyl peroxide	40% to 60%	94-36-0
Dicyclohexyl phthalate	40% to 60%	84-61-7

No further information available for this product.

4. FIRST AID MEASURES

EYES: Hold open eyelids and flush with copious amounts of water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical advice/attention.

SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

INGESTION: Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Consult physician or poison center immediately.

INHALATION: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

If breathing is difficult, oxygen should be administered by qualified personnel.

NOTES TO PHYSICIAN: No data available for this product.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Alcohol resistant foam; Carbon Dioxide (CO₂); dry chemical; dry sand; use water to keep containers cool.

UNSUITABLE EXTINGUISHING MEDIA: Halons.

SPECIFIC HAZARDS IN CASE OF FIRE: CAUTION: reignition may occur. Decomposition under effect of heating (See also Section Hazardous decomposition products). If involved in a fire, it will support combustion. dust explosion hazard. In case of fire and/or explosion do not breathe fumes.

Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition. Cool closed containers with water. Water used to extinguish a fire should not be allowed to enter the drainage system or water courses.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTION FOR FIRE FIGHTERS: Wear self-contained breathing apparatus (SCBA) in positive pressure mode and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Do not breathe dust. Avoid generation of dust during clean-up of spills. Wear suitable protective clothing, gloves and eye/face protection. Use recommended respiratory protection.

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ENVIRONMENTAL PRECAUTIONS: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

METHOD AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Stop leakage if possible. Eliminate all sources of ignition, and do not generate flames or sparks. Sweep up and put it into a container for disposal. Avoid dust generation. Keep contents moist. The waste should NOT be confined. Flush surroundings with large amounts of water and soap.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: When using do not eat, drink or smoke. Do not breathe dust. Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal soaps). Keep product and emptied container away from heat and sources of ignition. Confinement must be avoided. Do not allow to dry out. Avoid contact with skin and eyes. Avoid Incompatible materials (See Section 10).

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES: Requirements for storage areas and containers: Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. No smoking. Store apart from other dangerous and incompatible substances.

Storage temperature should not exceed 27° C/80° F

8. EXPOSURE CONTROLS\PERSONAL PROTECTION

EXPOSURE LIMITS

Components	CAS	Limits
Benzoyl peroxide	94-36-0	ACGIH TLV; TWA 5 mg/m3 NIOSH REL; TWA 5 mg/m3
Dicyclohexyl phthalate	84-61-7	None established.

ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas. Avoid dust production.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.

EYES PROTECTION: Use safety glasses (with side shields) as minimum protection. Goggles recommended. Wearing contact lenses when working with cement is not recommended.

SKIN PROTECTION: Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection: Use chemical resistant gloves. Consult glove manufacturer for recommendations.

WORK HYGIENIC PRACTICES: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating. Wash contaminated clothing before reuse. Eye wash stations and emergency showers should be available.

OTHER USE PRECAUTIONS: The type and degree of personal protective equipment will depend on the specific work operation. Eye wash stations and emergency showers should be available. Inspect and replace personal protective equipment at regular intervals; use professional care in their selection, use and care.

COMMENTS: None.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Powdered crystalline solid

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COLOR: White

FLASH POINT AND METHOD: No data available for this product.

AUTO-IGNITION TEMPERATURE: Not Determined.

BOILING POINT/RANGE: No data available for this product.

MELTING POINT: Not Determined.

VAPOUR PRESSURE: Not determined.

VAPOUR DENSITY: Heavier than air.

SOLUBILITY: Not determined.

ODOR/THRESHOLD: Mild, characteristic.

LOWER / UPPER FLAMMABLE LIMITS: No data available for this product.

DENSITY: 1.2358

EVAPORATION RATE: N/A

PARTITION COEFFICIENT: Not determined.

pH: Not Applicable.

DECOMPOSITION TEMPERATURE: SADT 55 °C. See also Section 10.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self-accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the following temperature: 55 °C. Contact with incompatible substances can cause decomposition at or below the SADT 55 °C.

POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur under normal conditions.

CONDITIONS TO AVOID: Avoid shock and friction. Confinement must be avoided.

MATERIALS TO AVOID: Avoid contact with rust, iron and 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, PP, polyethylene or glass-lined equipment.

HAZARDOUS DECOMPOSITION PRODUCTS: Benzoic acid, Benzene.

11. TOXICOLOGICAL INFORMATION

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE EFFECTS:

EYE CONTACT: May cause eye irritation. Corneal injury is unlikely.

SKIN CONTACT: Has caused allergic skin reactions in humans. Contains component(s) which have demonstrated the potential for contact allergy in mice.

INHALATION: This product is of low volatility and not expected to be a major inhalation hazard.

INGESTION: Ingestion may cause gastrointestinal tract irritation.

TARGET ORGAN: Not classified with regard to specific target organs

CHRONIC EFFECTS: Germ cell mutagenicity; Not mutagenic

Genotoxicity; No evidence of genotoxic effects in vivo.

Carcinogenicity; Not carcinogenic

TOXICITY VALUES: 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

>5000 mg/kg (rat)

Inhalation LC50

>24300 mg/m³ (rat), dust

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12. ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY:

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%

Degradation Abiotic

Half-life: 2.4 hours at 50°C

Degradation Biotic

Inherently biodegradable.

BIO-ACCUMULATIVE POTENTIAL:

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%

Bio Concentration Factor (BCF): 66.6

MOBILITY IN SOIL:

Not determined.

OTHER ADVERSE EFFECTS:

Very toxic to aquatic organisms.

ECOTOXICOLOGICAL OTHER INFORMATION:

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

96h-LC50: 0.06 mg/l

daphnia

48h-EC50: 0.11 mg/l (Daphnia magna)

algae

72h-EC50: 0.06 mg/l

bacteria

Activated sludge respiration inhibition test EC50: 35 mg/l

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of according to local, state, and federal regulations through a licensed disposal facility.

14. TRANSPORT INFORMATION

UN NUMBER: 3106

UN PROPER SHIPPING NAME: Organic peroxide type D, solid (Dibenzoyl peroxide, 50%)

TRANSPORT HAZARD CLASS:

5.2

TRANSPORT HAZARD SUBCLASS:

Not applicable.

PACKING GROUP: II

MARINE POLLUTANT Y/N:

DOT - Yes

IATA - Yes

IMDG - Yes

SPECIAL PRE-CAUTIONS: None

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15. REGULATORY INFORMATION

U.S. REGULATIONS:

All components of this product are listed on or exempt from the TSCA Inventory.

U.S. SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: Yes

PRESSURE GENERATING: No

REACTIVITY: Y

ACUTE: Yes

CHRONIC: No

313 REPORTABLE INGREDIENTS:

313 REPORTABLE INGREDIENTS

Chemical Name	Weight %	CAS
Benzoyl peroxide	45% to 50%	94-36-0

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No reportable components

STATE REGULATIONS:

No components are known to be on the California Proposition 65 list.

Massachusetts Right To Know Components

Chemical Name	CAS
Benzoyl peroxide	94-36-0

Pennsylvania Right To Know Components

Chemical Name	CAS
Benzoyl peroxide	94-36-0
Dicyclohexyl phthalate	84-61-7

New Jersey Right To Know Components

Chemical Name	CAS
Benzoyl peroxide	94-36-0
Dicyclohexyl phthalate	84-61-7

OTHER GOVT. REGULATIONS: No other information available

16. OTHER INFORMATION

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