FREEMAN Manufacturing & Supply Company

Safety Data Sheet

Cream Hardener

Section 1 Product and Company Identification

Product identifier

Cream Hardener For Freeman "TUF" Line Of Repair & Build-Up Materials

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

Polymer Reaction Catalyst – For Industrial / Professional Use Only

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company
1101 Moore Road, Avon, OH 44011 USA
Telephone: (440) 934-1902
Email: contactus@freemansupply.com

24-Hour emergency telephone number:
CHEMTREC (800) 424-9300

Section 2 Hazard Identification

Classification of Mixture

Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2A
Skin Sensitization, Category 1
Acute Aquatic Toxicity, Category 1
Organic Peroxides, Type E

Label Requirements

Warning

Hazard Statements

Heating may cause a fire.
Very toxic to aquatic life.
Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.

Precautionary Statements

Prevention: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing, incompatible materials and combustible materials. Keep only in original container. Avoid breathing dust. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage: Protect from sunlight. Store at temperatures not exceeding 25 °C/77 °F. Keep cool.
Store away from other materials.

Disposal: Dispose of contents and containers in accordance with local and national regulations.

Section 3 Composition/Information on Ingredients

Ingredient	CAS Number	Weight (%)
Dibenzoyl peroxide	94-36-0	50 - 75
Zinc stearate	557-05-1	5 - 10
Calcium sulfate	7778-18-9	≤ 5

Section 4 First-Aid Measures

First-aid measures

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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

Inhalation: Call a POISON CENTER or doctor if you feel unwell.

Ingestion: Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Potential acute health effects and symptoms of overexposure

Eye contact: Causes serious eye irritation. Adverse symptoms may include pain or irritation, watering, redness.

Inhalation: No known significant effects or critical hazards.

Skin contact: Causes skin irritation. May cause an allergic skin reaction. Adverse symptoms may include irritation and redness.

Ingestion: No known significant effects or critical hazards.

Indication of any immediate medical attention and special treatment needed, if necessary

Note to Physicians: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Protection of First Responders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5 Fire-Fighting Measures

Extinguishing media

Suitable: Use an extinguishing agent suitable for the surrounding fire

Unsuitable: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the substance or mixture

Runoff to sewer may create fire or explosion hazard. This material increases the risk of fire and may aid combustion. Heating may cause a fire. May re-ignite itself after fire is extinguished. Hazardous decomposition may occur.

Hazardous thermal decomposition

Decomposition products may include carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, metal oxide/oxides.

Special protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors or mists. Use personal protective equipment as required.

Avoid contact with skin, eyes and clothing. Use personal protective equipment recommended in Section 8.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

Methods and materials for containment and cleaning up

Dispose of waste product or used containers according to local regulations. Clean contaminated surface thoroughly with detergents. Avoid solvent cleaners. Contain and collect spillage, placing waste in appropriate containers for disposal according to local regulations (see sections 13).

Section 7 Handling and Storage

Advice on safe handling

Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Use only with adequate ventilation. Do not breathe dust/fume/gas/vapors/spray. Keep away from clothing and other combustible materials. Keep away from heat, sparks, and open flame. When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for safe storage

Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. To avoid the risk of formation of shock-sensitive crystals or loss of stability, it is important to store the product within the recommended temperature range. Temperature control may be required. Store in segregated and approved area. Protect from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store at temperatures not exceeding 25 °C/77 °F. Keep away from heat, sparks and open flame.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Chemical Name CAS Number	ACGIH TLV	OSHA PEL	NIOSH REL
Dibenzoyl peroxide 94-36-0	TWA: 5 mg/m^3 8 hours	TWA: 5 mg/m^3 8 hours	TWA: 5 mg/m^3 10 hours
Zinc stearate 557-05-1	TWA: 10 mg/m^3 8 hours Inhalable fraction	TWA: 5 mg/m^3 8 hours Respirable fraction	TWA: 5 mg/m^3 10 hours Respirable fraction
Calcium sulfate 778-18-9	TWA: 10 mg/m^3 8 hours Inhalable fraction	TWA: 5 mg/m^3 8 hours Respirable fraction	TWA: 5 mg/m^3 10 hours Respirable fraction

Appropriate Engineering Controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Use with adequate ventilation.

Environmental Exposure Controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures, personal protective equipment (PPE)

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, use chemical splash goggles.

Skin/body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

Section 8 Exposure Controls/Personal Protection continued

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

General Hygienic Practices

Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9 Physical and Chemical Properties

Appearance	White paste/solid
Odor	Slight
Odor threshold	No data available
pH	No data available
Melting Point	No data available
Boiling Point	100°C (212°F)
Evaporation Rate	0.09 (butyl acetate = 1)
Flash Point	94°C (201.2°F) (Pensky-Marten Closed Cup)
Flammability (solid, gas)	No data available
Upper/Lower Flammability	No data available
Vapor Pressure	2.3 kPa (17.5 mm Hg) at 20°C
Vapor Density	1 (Air = 1)
Relative Density	1.19
Density	9.98 lb./gal
Water Solubility	No data available
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	50°C (122°F)
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing
VOC Content Weight Percentage	20% (estimated)
VOC Content	238 g/L (estimated)

Section 10 Stability and Reactivity

Reactivity: This product, in laboratory testing, neither detonates nor deflagrates and only shows low or no effect when heated under confinement.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include temperature increase, high temperature.
Reactions may include hazardous decomposition, risk of causing fire.
Hazardous polymerization: None under normal processing.
Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Avoid increased storage temperature
Incompatible materials: Reactive or incompatible with combustible materials,
reducing materials, copper, iron, and rust.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

Information on likely routes of exposure and symptoms of exposure

Eye Contact Causes serious eye irritation

Skin Contact Causes skin irritation. May cause an allergic skin reaction

Inhalation No known significant effect or critical hazards

Ingestion No known significant effect or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Adverse symptoms may include pain or irritation, watering, redness.

Inhalations No specific data.

Skin contact Adverse symptoms may include irritation and redness.

Ingestion No specific data.

Acute toxicity

Chemical Name	Oral LD50
Dibenzoyl peroxide	6400 mg/kg (Rat)
Zinc stearate	10 g/kg (Rat)

Potential health effects from short and long-term exposure

Skin corrosion/irritation causes skin irritation

Serious eye damage/eye irritation Causes serious eye irritation

Skin sensitization May cause an allergic skin reaction

Mutagenicity No data available

Carcinogenicity No data available

Teratogenicity No data available

Specific Target Organ Toxicity (Single Exposure) No data available

Specific Target Organ Toxicity (Repeated Exposure) No data available

Aspiration Hazard No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Section 12 Ecological Information

Toxicity

Component	Species	Test Result
Calcium Sulfate Dihydrate (CAS 7778-18-9)	Fathead minnow (Pimephales promelas)	LC50 >1970 mg/L, 96 hours

Very toxic to aquatic life. Prevent product from entering drains.

This material meets the definition of a marine pollutant.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

Partition coefficient n-octanol / water (log K_{ow}): 3.46 (Benzoyl peroxide)

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13 Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14 Transport Information

DOT :	**UN/ID No.:**	UN3108
	Proper Shipping Name:	Organic Peroxide Type E, Solid (<52% Dibenzoyl Peroxide)
	Hazard Class:	5.2
	Packing Group:	Not applicable
	Special provisions:	Emergency Response Guide Number - 145
IATA:	**UN/ID No.:**	UN3108
	Proper Shipping Name:	Organic Peroxide Type E, Solid (<52% Dibenzoyl Peroxide)
	Hazard Class:	5.2
	Packing Group:	Not applicable
	Special provisions:	A20, A802
IMDG:	**UN/ID No.:**	UN3108
	Proper Shipping Name:	Organic Peroxide Type E, Solid (<52% Dibenzoyl Peroxide)
	Hazard Class:	5.2
	Packing Group:	Not applicable
	Special provisions:	122. 274 EmS-no F-J, S-R

Environmental Hazard

Marine pollutant: This material meets the definition of a marine pollutant. Dibenzoyl peroxide, Zinc stearate

Section 15 Regulatory Information

US Federal Regulations

Superfund Amendments and Reauthorization Act (SARA) 302 Extremely hazardous substance: Not listed.
SARA 313 TRI reporting: Benzoyl peroxide (94-36-0) 50-75%, Zinc Stearate (557-05-1) 5-10%
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated.
Safe Drinking Water Act (SDWA): Not regulated.

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Inventories

United States – Toxic Substance Control Act (TSCA): All components are listed or exempt from listing.
Canada - Domestic Substance List (DSL): All components are listed or exempt from listing.
China - Inventory of Existing Chemical Substances in China (IECSC): All components of this product comply with the inventory requirements.
Europe - European Inventory of Existing Commercial Chemical Substances (EINECS): All components of this product comply with the inventory requirements.
Europe - European List of Notified Chemical Substances (ELINCS): All components of this product comply with the inventory requirements.
Korea - Existing Chemicals List (ECL): All components of this product comply with the inventory requirements.

Section 16 Other Information

HMIS

Health Hazards: 3 Flammability: 0 Physical Hazards: 4

Disclaimer

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