



SAFETY DATA SHEET

Issuing Date 15-Apr-2015

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ECR# 23477

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

GHS product identifier

Product Name Bio-Cap

Other means of identification

Synonyms None

Product Type Paste

Recommended use of the chemical and restrictions on use

Recommended Use Professional dental restorative

Uses advised against No information available

Supplier's details

Supplier Address
DenMat
1017 W. Central Ave.
Lompoc, CA 93436
TEL: 805-346-3700

Emergency telephone number

Emergency Telephone Number 805-346-3700

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Sensitizer	Category 1B
Skin Corrosion/Irritation	Category 2

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word : Warning

Hazard Statements

Hazard Statements

- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation

Precautionary Statements

- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation
- P261 - Avoid breathing vapors.
- P264 - Wash hands and forearms thoroughly after handling.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P280 - Wear eye protection, protective gloves.
- 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.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P501 - Dispose of contents/container according to local, regional, national, and international regulations.



Appearance Tooth color

Physical State Paste **Odor** slight ester/sweet smell

Prevention

- Wash face, hands and any exposed skin thoroughly after handling.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Keep container tightly closed.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Keep cool

General Advice

None

Eyes

- 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 advice/attention

Skin

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

Inhalation

- If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician if you feel unwell

Fire

- In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage

- Store locked up.

Disposal

- Dispose of contents/container to an approved waste disposal plant.

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

Aspiration hazard if swallowed - can enter lungs and cause damage Harmful to aquatic life

<5% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
ethoxylated bisphenol-a-dimethacrylate	56744-60-6	15 - 25	*
polyacrylic acid	9003-01-3	1-5	*
2-hydroxy ethyl methacrylate	868-77-9	2 - 10	*
Bis[2-[(2-methyl-1-oxoallyl)oxy]ethyl] dihydrogen benzene-1,2,4,5-tetracarboxylate	51156-91-3	5 - 10	*
tartaric acid	87-69-4	0.1 – 0.5	*
camphorquinone	10373-78-1	0.05 – 0.1	*
silica	68611-44-9	1 - 5	*
ethyl 4-dimethylaminobenzoate	10287-53-3	0.05 – 0.1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
Skin Contact	Wash off with warm water and soap. Consult a physician if necessary.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If feeling unwell, seek medical attention.
Ingestion	Rinse oral cavity with copious water. If feeling unwell, call a physician or Poison Control Center immediately.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects Mild skin irritation

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

Notes to Physician Not Applicable

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

None

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Avoid breathing vapors or mists. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

Environmental Precautions

Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE**Precautions for safe handling**

Handling Ensure adequate ventilation. Avoid breathing vapors. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and away from direct sunlight.

Incompatible Products Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters**

Occupational Exposure Limits None Established

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields. Tightly fitting safety goggles.
Skin and Body Protection Long sleeved clothing. Impervious gloves.
Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid (paste)	Appearance	Various colors
Odor	Minimal; Ester/sweet	Odor Threshold	No information available
<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>	
pH	Not Applicable		
Melting Point/Range	Not Applicable		
Boiling Point/Range	Not Applicable		
Flash Point	Not Applicable		
Evaporation rate	Not Applicable		
Flammability (solid, gas)	No data available		
Flammability Limits in Air			
upper flammability limit	No data available		
lower flammability limit	No data available		
Vapor Pressure	No data available	None known	
Vapor Density	Not Applicable	None known	
Specific Gravity	1.8-1.9 @ 25°C		
Water Solubility	Insoluble	None known	
Solubility in other solvents	Partially soluble in acetone and ethanol	None known	

Information on basic physical and chemical properties

Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	High viscosity	

Flammable Properties Not flammable

Explosive Properties No data available
Oxidizing Properties No data available

Other information

VOC Content (%) None

10. STABILITY AND REACTIVITY

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal conditions.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Ignitions sources - heat, sparks and open flames.

Incompatible materials

Strong acids. Strong oxidizing agents.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	The product itself has not been tested. Data is for major component in product.
Inhalation	May cause drowsiness and dizziness based on components. May cause irritation of respiratory tract.
Eye Contact	Irritating to eyes.
Skin Contact	May cause skin irritation and/or dermatitis.
Ingestion	Potential for aspiration if swallowed. Vomiting may aspirate into lungs and cause chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	May cause drowsiness and dizziness. Eye contact with liquid may cause irritation including stinging, burning, tearing, or reddening of the eyes.
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Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization	No information available.
Mutagenic Effects	No information available.
Carcinogenicity	No information Available.

Acute Toxicity

Chemical Name	Result	Species	Dose
ethoxylated bis-phenol-A	LD 50 Oral	Rat	>2000 mg/kg
2-hydroxyethyl methacrylate	LD 50 Oral	Rat	5,564 mg/kg

Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organ Effects	Respiratory system.
Aspiration Hazard	Based on product level data, this product does not meet the requirement to be classified as an aspiration hazard. However, this product contains an ingredient that may cause aspiration if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
ethoxylated bis-phenol-A dimethacrylate 41637-38-1	EC50 48h >100 mg/l OECD Guideline 201	LD50 96h >100 mg/l OECD Guideline 203	EC50 48h >100 mg/l OECD Guideline 202
2-hydroxyethyl methacrylate 868-77-9		Flow Through (Fathead Minnow) 227 mg/l - 96 h	

Persistence and Degradability	No information available.
Bioaccumulation	No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

UN-Number
Proper shipping name
Hazard Class
Packing Group
Description
Emergency Response Guide
Number

Not Regulated

15. REGULATORY INFORMATION

International Inventories

TSCA All components of this product are either listed or are exempt on the TSCA inventory.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

None of the components are listed

U.S. State Right-to-Know Regulations

Massachusetts	The following components are listed: Amorphous silica, benzoyl peroxide
New York	None of the components are listed
New Jersey	Fluorides; barium compounds
Pennsylvania	Barium compounds; silica

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard 1	Flammability 0	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 1	Flammability 0	Physical Hazard 0	Personal Protection X

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General Disclaimer

The information provided on this SDS 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.

End of Safety Data Sheet