SAFETY DATA SHEETS

This SDS packet was issued with item:

075348222

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

075348172 075355508

Material Safety Data Sheet SLEDGEHAMMER®

Heat Cure Powder

Section I - Product and Company Identification

Product Name: SLEDGEHAMMER HEAT CURE DENTAL ACRYLIC POWDER
Chemical Name: Polymethylmethacrylate

Family: Acrylic Polymer

Manufacturer: KEYSTONE RESEARCH & PHARMACEUTICAL
616 Hollywood Avenue
Cherry Hill, NJ 08002

Product Use: Dental Polymer
Formula: Proprietary Formulation

Emergency Phone Numbers: (800) 535 - 5053
Information Contacts: (856) 663 - 4700

Product Number – 100470, 1000471, 1000472, 1000473, 1000474, 1000475, 1000476, 1000477, 1000478, 1000494, 1000495, 1000496, 1000498, 1000499, 1000500, 1000502, 1000503,m 1000504, 1000535, 1000536, 1000537, 1000543, 1000544, 1000545, 1001961, 1001962, 1001963, 1001965, 1001966, 1001967

Section II - Hazardous Ingredients

Chemical Identity	CAS Numbers	Exposure Limits OSHA TWA/STEL	ACGIH TWA/STEL	Carcinogen IARC/NTP/OSHA
Residual Monomer	N/R	N/R	N/R	N/E
Dibutyl Phthalate	84-74-2	5 mg/m3	5 mg/m3	N/E
Benzoyl Peroxide	94 - 36 - 0	5 mg/m3	5 mg/m3	N/E
Titanium Dioxide	13453 - 67 - 7	15 mg/m3	10 mg/m3	N/E

N/E - None Established N/A - Not Applicable N/DA - No Data Available N/R - Not Reviewed

Section III - Hazards Identification

EMERGENCY OVERVIEW

- Free flowing powder
- Considered a nuisance dust.
- Can cause eye/skin irritation.
- Polymer dust is combustible .
- Decomposition products include Methyl Methacrylate and Carbon Monoxide.

Potential Health Effects, Signs and Symptoms of Exposure:

Primary Route of Entry	Eyes or skin (No absorption); inhalation of dust .
Eye	Higher concentration can irritate eyes. May cause eye irritation or damage
Skin	Repeated or prolonged exposure may cause allergic skin rashes.
Ingestion	Higher concentration can irritate respiratory system .
Inhalation	Possible temporary discomfort due to inhalation of dust concentration above the permissible exposure limit. Dust may cause irritation of the nose , throat , and lungs.

Sub-Chronic Effects

Target Organs: For Polymer: None Listed. For Decomposition Product, Methyl Methacrylate Monomer: Nose, Liver and Kidneys. For Dibutyl Phthalate: None Listed. For Benzoyl Peroxide: None Listed. For Titanium Dioxide: None Listed.

Threshold Limit Value (Tlv): For Polymer: NE. For Decomposition Product, Methyl Methacrylate Monomer: 100ppm. For Dibutyl Phthalate: 5ppm. For Benzoyl Peroxide: 5mg/m3. For Titanium Dioxide: 10 mg/m3

Permissible Exposure Limit (Pel): For Polymer: NE. For Decomposition Product, Methyl Methacrylate: 100 ppm. For Dibutyl Phthalate: 5 ppm. For Benzoyl Peroxide: 5mg/m3. For Titanium Dioxide: 15 mg/m3

Human Patch Test: Approximate one-third of subjects developed mild redness at the site of application. Twenty percent showed sensitivity when tested 10 days later.

Reproductive Effects: Inhalation TClo, rat: 54 mg/m3/54 minutes,6-15 days of pregnancy. Inhalation TClo.rat: 54 mg/m3/24 hours, 8 weeks of pregnancy. Inhalation TClo, rat: 4480 mg/m3/2 hours, 6 -18 days of pregnancy. RTECS: OZ50750000, TSCA Inventory ; 1986

For Dibutyl Phthalate:
TC50 Inhalation Human: 1000mg/m3. LD50 Intraperitoneal Mouse: 2749 mg/kg. LD50 Intraperitoneal Rat: 5058 mg/kg. LD50 Intravenous Rabbit: 100 mg/kg. LD50 Oral Guinea Pig: 8600 mg/kg. LD50 Oral Mouse: 6172 mg/kg. LD50 Oral Rat: 8600 mg/kg. LD lo Oral Rabbit: 1000mg/kg. LDlo Subcutaneous Guinea Pig: 3000 mg/kg. RTECS. T11050000,TSCA: 1986

For Benzoyl Peroxide:
LDlo Intraperitoneal Mouse: 250 mg/kg. LD50 Oral Rat: 7710 mg/kg.RTECS: DM8575000.TSCA: 1986.

For Titanium Dioxide:
LD50 Oral Rat: > 9000mg/kg. RTECS: TI08755079. TSCA: 1986.

Section III - Hazards Identification Continued

Effects Of Overexposure:

For Polymer:
OSHA classifies this material as Particulates, Not Otherwise Classified. Eyes, skin and Respiratory tract may be irritated by gross overexposure to Particulates, Not Otherwise Classified, no matter how they are generated. Avoid inhalation of dust. Keep dust out of eyes to prevent possible irritation.

For Decomposition Product:
Methyl Methacrylate Monomer; Liquid or high vapor concentration can irritate eyes, respiratory system and cause skin rashes. Prolonged exposure can lead to headaches, nausea, staggering gait, confusion, drowsiness and unconsciousness. Repeated and prolonged over exposure may cause permanent brain and nervous system damage, allergic skin rashes. eye corrosion and permanent injury, as well as changes in liver and kidney function or damage.

For Benzoyl Peroxide:
Prolonged and /or repeated skin contact may cause skin irritation, defatting, dermatitis and sensitization. May cause eye irritation or damage. Dust may cause irritation of the nose, throat and lungs. May produce muscular weakness upon ingestion.

For Dibutyl Phthalate: Direct contact with the liquid or exposure to its vapors or mists may cause burning, tearing, redness and swelling of the eyes. Prolonged or repeated skin exposure may cause redness, burning, drying, cracking and dermatitis. Persons with pre-existing skin disorders may be more susceptible to this material. Inhalation of excessive amounts may cause irritation of the nose, and throat, central nervous system depression such as drowsiness, dizziness, loss of coordination and fatigue. Persons with impaired lung function or asthma-like conditions may experience additional breathing difficulties. Ingestion of large amounts may cause irritation of the digestive tract and signs of nervous system depression.

For Titanium Dioxide:
May cause temporary drying effect or irritation of mucous membrane. Although non-corrosive, non-irritating and non-sensitizing, it may have a drying effect on the skin. In contact with the eye it is an inert foreign body. Harmless if swallowed, physiologically inert.

NOTE: Refer to Section 11, Toxicological Information for Details

Section IV - First Aid Measures

First Aid for Eye	Flush with water for 15 minutes, including under eyelids. Get medical help if discomfort persists.
First Aid for Skin	Wash with soap and water. Get medical help if discomfort persists.
First Aid for Inhalation	Remove to fresh air. Get medical help if discomfort persists.
First Aid for Ingestion	Rinse mouth out with water. Call doctor if amount was large.

Section V - Fire Fighting Measures

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)
304 deg C ; 579 deg F	NA	Na

Extinguishing Media:	Water, Carbon Dioxide , Dry Chemical
Fire Fighting Instructions:	Avoid extinguishing methods which may generate dust cloud . Water stream can disperse dust into air, producing a fire hazard and possible explosion hazard if exposed to ignition source.
Unusual Hazards:	Polymer dust is combustible . The explosive limits of the polymer particles suspended in air are approximately those of coal dust. Firefighters should wear self-contained breathing apparatus.

Section VI - Accidental Release Measures

Spill or Release Procedures - Sweep up to avoid slipping hazard. Keep airborne particulates at a minimum when cleaning up spills.

Section VII - Handling and Storage

Handling	• Observe precautions found on the label. Wash face and hands thoroughly with soap and water after handling and before eating, drinking or smoking.Avoid prolonged or repeated contact with skin. Avoid contamination. Use only with adequate ventilation.
Storage	• Store in cool, dry place away from heat, sparks, flame and direct sunlight. Close container after each use. Ground all metal conrainers when transferring. Use explosion-proof equipment Store away from combustibles and incompatible materials.
Explosion Hazard	• Polymer dust is combustible, explosive limits of the polymer particles suspended in air are approximately those of coal dust.

Section VIII - Exposure Controls / Personal Protective Equipment

Engineering Controls	Use good local exhaust at processing equipment, including buffers, sanders, grinders and polishers . High temperature processing equipment should be well ventilated. Use explosion-proof equipment.Provide ventilation if necessary to control exposure levels below airborne exposure limits.

Personal Protective Equipment

General	Dust collectors are recommended for handling powder in bulk
Eye/ Face Protection	Use safety glasses and have eye flushing equipment immediately available.
Skin Protection	Minimize contamination by following good industrial practice. Wearing nitrile, neoprene, pvc, latex ot other impermeable gloves is recommended.
Respiratory Protection	Avoid breathing dust and mist. Use dust mask.

Section IX - Physical and Chemical Properties

Appearance	Odor & Odor Threshold	pH	Specific Gravity	Viscosity	% Volatile
Clear, pink, or reddish-pink free flowing powder	Faint odor in bulk	N/A	N/E	N/A	0.0

Boiling Point/ Freezing Point	Decomposition Temperature	Octanol/Water Partitioning Coefficient Log Po/w	Vapor Pressure:	Vapor Density	Evaporation Rate	Ignition	Solubility In Water (20°C)
N/A	572 F/ 300 C	N/A	N/A	N/A	N/A	N/A	Insoluble

Section X - Stability and Reactivity

Stability: Stable **Incompatibility (Materials to Avoid):** Strong oxidizing agents
Hazardous Decomposition Products: Methacrylate Monomer and Carbon Monoxide **Hazardous Polymerization:** Will not occur
Conditions to Avoid: Heating above 300 deg C

Section XI - Toxicological Information

Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation Toxicity	Eye / Skin Irritation
LD50 Oral (Rat): 7990mg/kg	LD50 Dermal (Rabbit): 35,500 mg/kg	LC50 Inhalation (Rat: >12,500 to 16,500 ppm for 0.5 hrs	None

Sensitization N/DA **Mutagenicity** N/DA **Sub-chronic Toxicity** N/DA

Section XII - Ecological Information

Ecotoxicological Information

Acute Toxicity to Fish	Acute Toxicityto Invertebrates	Acute Toxicityto Algae	Bioconcentration	Toxicity to Sewage Bacteria
Flathead minnows and goldfish TLm24: 420 ppm Bluegills TLm24: 368 ppm	N/DA	N/DA	N/DA	N/DA

Chemical Fate Information

Biodegradability N/DA **Chemical Oxygen Demand** N/DA

Section XIII - Disposable Concentrations

- This product contains a Dibutyl Phthalate ,contaminated product may be a RCRA/OSHA hazardous waste (40 CFR Part 261 and 29 CFR Part 1910). Incinerate material in accordance with Federal, State and Local regulations.

Section XIV - Transport Information

- NA

Section XV - Regulatory Information

US Federal Regulations

Clean Air Act: HAP	This product contains no hazardous air pollutants (HAP), as defined by the U. S. Clean Air Act.
Clean Air Act: ODS	This product neither contains , nor was manufactured with a Class I or Class II ozone depleting substances (ODS).
Clean Water Act: Priority Pollutant	This product contains no chemicals listed under the U.S. Clean Water Act Priority Pollutant List.

Section XV - Regulatory Information Continued

FDA: Food Packaging Status	This product has not been cleared by the FDA for use in food packaging and/ or other applications as an indirect food additive.
Occupational Safety and Health Act	This product contains hazardous chemical under the OSHA Hazard Communication Standard. Its hazards are: Immediate (acute) health hazard; Fire hazard
RCRA	This product contains chemicals considered to be hazardous waste under RCRA (40 CFR 261). Dibutyl Phthalate ; CAS NO: 84-74-2 ; RCRA Code: U088
SARA Title III: Section 302	This product contains no chemicals regulated under Sec. 302 as extremely hazardous substances.
SARA Title III: Section 304	This product contains chemicals regulated under Sec. 304 as extremely hazardous chemicals for emergency release notification ("CERCLA " List). Dibutyl Phthalate; CAS NO: 84 74-2; RQ(Lbs): 1000
SARA Title III: Section 311-312:	This product contains hazardous substance under the OSHA Hazard Communication Standard and is regulated under Section 311-312 (40 CFR 370). Its hazards are: Immediate (acute) health & fire hazard
SARA Title III: Section 313:	This product contains chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. Benzoyl Peroxide: CAS NO: 94 - 36 - 0
TSCA Section 8(b): Inventory:	None

State Regulations

CA Proposition 65	This product contains no substances known to the State of California to cause cancer and reproductive effects.
MA Right-to-Know Law:	This product contains: Benzoyl Peroxide; CAS NO: 94-36-0 Dibutyl Phthalate; CAS NO: 84-74-2 which are listed on the Massachusetts Hazardous Substance List.
NJ Right-to-Know Law:	This product contains: Benzoyl Peroxide; CAS NO: 94-36-0 Dibutyl Phthalate; CAS NO: 84-74-2 which are listed on the New Jersey Hazardous Substance List.
PA Right-to-Know Law:	This product contains: Dibenzoyl Peroxide; CAS NO: 94-36-0 Dibutyl Phthalate; CAS NO: 84-74-2 which are listed on the Pennsylvania Environmental Hazardous Substance List.

International Regulations

CDSL: Canadian Inventory (on Canadian Transitional List)	All components of this product are listed on the Canadian DSL
EINECS: European Inventory:	No information available

Section XVI - Other Information

Hazard Rating System	NFPA: Health = NA/Flammability = NA/Reactivity = NA HMIS: Health = 1/Flammability/ = 1/Reactivity = 0

Approval Date: 9/20/00 Revised August 14, 2008

Revised to change all appearances of Dialkyl Phthalate C.A.S. 84-66-2 to Dibutyl Phthalate C.A.S. 84-74-2 in sections II, III, XIII and XV and added product numbers to section I.

The information presented herein was obtained from sources considered to be reliable. However, this information is provided without any warranty, expressed or implied, regarding its correctness or suitability for consumers intended use and/or application. For this and other reasons, we assume no responsibility and expressly disclaim liability for loss, damage or expense arising out of any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared expressly for this product. Use the materials only as directed. If the product is used as a component of another product, the information contained within the MSDS may not be applicable. If one could have any concerns with or problems understanding this MSDS form, please direct all questions to INFOTRAC, Chemical Emergency Resources System at 1(800)535-5053.

Material Safety Data Sheet SLEDGEHAMMER®

HEAT CURE LIQUID

Section I - Product and Company Identification

Product Name: SLEDGEHAMMER HEAT CURE DENTAL ACRYLIC MONOMER
Chemical Name: NA

Family: Monomer

Manufacturer: KEYSTONE RESEARCH & PHARMACEUTICALS
616 Hollywood Avenue
Cherry Hill, NJ 08002

Product Use: Dental Monomer
Formula: Proprietary Formulation

Emergency Phone Numbers: (800) 535 -5053
Information Contacts: (856) 663 - 4700

Section II - Hazardous Ingredients

Chemical Identity	CAS Numbers	Exposure Limits OSHA TWA/STEL	ACGIH TWA/STEL	Carcinogen IARC/NTP/OSHA
Methyl Methacrylate	80 - 62 - 6	100 ppm	100 ppm	Not Listed
Ethylene Glycol Dimethacrylate	97 - 90 - 5	N/E	N/E	Not Listed
Inhibitor (MEHQ)	150 - 76 - 5	5 mg/m3	5 mg/m3	Not Listed

N/E - None Established
N/R - Not Reviewed
N/DA - No Data Available
N/A - Not Applicable

Section III - Hazards Identification

EMERGENCY OVERVIEW

- May cause allergic skin reaction and eye irritation.
- Flammable liquid and vapor.
- Hazardous polymerization may occur.
- May cause respiratory irritation.

Potential Health Effects, Signs and Symptoms of Exposure:

Primary Route of Entry	Inhalation, eyes & skin.
Eye	Vapor concentration may cause irritation of eyes. Liquid contact with eyes can cause irritation and possible corneal damage .
Skin	Liquid concentration may cause moderate skin irritation. Repeated or prolonged contact may cause allergic skin rashes, itching and swelling
Ingestion	Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Inhalation	High vapor concentrations may irritate the respiratory system. Prolonged exposure can lead to headaches, nausea, drowsiness and unconsciousness.
Sub-Chronic Effects	Prolonged and/or repeated exposure may lead to kidney, lung, liver and heart damage. Unlikely to present a cancer hazard to man.

NOTE: Refer to Section 11, Toxicological Information for Details

Section IV - First Aid Measures

First Aid for Eye	Flush with water for 15 minutes, including under eyelids. Get medical help if discomfort persists.
First Aid for Skin	Wash thoroughly with soap and water. Remove contaminated clothing. Get medical help if discomfort persists.
First Aid for Inhalation	Remove to fresh air. If having breathing difficulty, give oxygen. If breathing has stopped, give artificial respiration. Get medical help if discomfort persists.
First Aid for Ingestion	If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Seek medical attention if symptoms persists.

Section V - Fire Fighting Measures

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)
TAG Closed: 68 F	LEL : 2% ; UEL : 12.5%	421 deg C

Method:

Extinguishing Media: Foam,carbon dioxide,dry chemical or carbon tetrachloride.

Fire Fighting Instructions: Wear self-contained breathing apparatus and full protective gear.Water may be ineffective unless used as a fine spray or fog. Use water spray to cool the exposed containers of methyl methacrylate.

Unusual Hazards: Vapors may travel to source ignition or excessive temperatures. Heat can induce polymerization with rapid release of energy.Closed containers may rupture explosively. Spontaneous polymerization may occur on prolonged aging. Explosive mixtures may occur at temperatures at or above the flashpoint.

Section VI - Accidental Release Measures

Spill or Release Procedures - Evacuate area and eliminate all possible sources of ignition. Use self contained breathing apparatus and protective clothing. Dike and absorb with inert materials (sand, soda, ash, vermiculite, etc) and then transfer to proper containers for disposal, using non-sparking tools.Keep spills out of sewers and open bodies of water. Remove saturated clothing and wash affected skin areas with soap and water.

Section VII - Handling and Storage

Handling
- Keep away from heat, sparks,flames and other sources of ignition.Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use with adequate ventilation. Ground all metal containers when transferring and use explosion-proof equipment.Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling.

Storage
- Store in a cool dry place, at ambient temperatures out of direct sunlight. Keep containers closed and away from heat.

Explosion Hazard
- Keep away from sparks and open flame. Closed containers may rupture explosively. Spontaneous polymerization may occur on prolonged aging.

Section VIII - Exposure Controls / Personal Protective Equipment

Engineering Controls: Use process enclosures, local exhaust ventilation. or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation with a minimum capture velocity of 100 ft/min at the point of monomer release.Refer to "Industrial Ventilation: A Manual of Recommended Practice " published by the American Conference of Governmental Industrial Hygiene.

Personal Protective Equipment

General: To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product. Provide eye wash stations and safety showers. Wear impervious clothing to prevent ANY contact with this product, such as gloves, apron, boots, or whole body suit. Nitrile rubber is better than PVC.

Eye/ Face Protection: Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying material.

Skin Protection: Use impermeable gloves to minimize skin contact.

Respiratory Protection: Use self- contained breathing apparatus when needed. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Section IX - Physical and Chemical Properties

Appearance	Odor & Odor Threshold	pH	Specific Gravity	Viscosity	% Volatile
Clear, colorless liquid	Characteristic strong, acrid odor	N/A	(H2O=1) : 0.94	N/A	W/W % : 99+

Boiling / Freezing Point	Decomposition Temperature	Octanol/Water Partitioning Coefficient Log Po/w	Vapor Pressure: (mm Hg)	Vapor Density (Air=1)	Evaporation Rate (Bu Ac=1)	Ignition	Solubility In Water (20°C)
214°F	N/A	N/A	29 @ 25°C	3.45	1.5	N/A	10% to 100%

Section X - Stability and Reactivity

Stability:
Stable

Hazardous Decomposition Products:
Acid fumes, CO and carbon dioxide

Conditions to Avoid:
Elevated temperatures, ignition sources, aging and contamination.

Incompatibility (Materials to Avoid):
Reducing/ oxidizing agents and UV light

Hazardous Polymerization:
May occur

Section XI - Toxicological Information

Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation Toxicity	Irritation - skin	Irritation - Eye
Oral(Rat) LD50: 7872 mg/kg	Dermal (Rabbit) LD50: 9400mg/kg	Inhalation (Rat) LC50 3750ppm	N/DA	N/DA

Sensitization	Mutagenicity	Sub-chronic Toxicity
N/DA	N/DA	N/DA

Section XII - Ecological Information

Ecotoxicological Information

Acute Toxicity to Fish	Acute Toxicity to Invertebrates	Acute Toxicity to Algae	Bioconcentration	Toxicity to Sewage Bacteria
96 hour LC50: fathead minnows: 150 ppm bluegill sunfish; 232 ppm	N/DA	N/DA	N/DA	N/DA

Chemical Fate Information

Biodegradability: N/DA

Chemical Oxygen Demand: N/DA

Section XIII - Disposable Concentrations

- After the addition of excess inhibitor, incinerate the liquid and diking materials in accordance with federal, state and local regulations. Do not incinerate in closed containers. Biodegradation is also possible.Empty containers must be handled with care due to product residue. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

Section XIV - Transport Information

- DOT/UN Shipping Name: Flammable Liquid, n.o.s., Class 3, UN 1993

Section XV - Regulatory Information

US Federal Regulations

Clean Air Act: HAP	This product contains hazardous air pollutants (HAP), as defined by the USA Clean Air Act. Methyl Methacrylate CAS NO : 80626
Clean Air Act: ODS	This product neither contains, nor was manufactured with a Class I or Class II ozone depleting substance(ODS).

Section XV - Regulatory Information Continued

Clean Water Act: Priority Pollutant	This product contains no chemicals listed under the USA Clean Water Act Priority Pollutant List.
FDA: Food Packaging Status	This product has not been cleared by the FDA for use in food packaging and / or other applications as an indirect food additive.
Occupational Safety and Health Act	This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard. Its hazard are: Immediate (acute) health hazard Fire hazard Reactive hazard
RCRA	This product is considered to be a hazardous waste under RCRA (40 CFR 261) : RCRA Code : U162
SARA Title III: Section 302	This product contains no chemicals regulated under Sec. 302 as extremely hazardous substances.
SARA Title III: Section 304	This product contains chemicals regulated under Section 304 as extremely hazardous chemical for emergency release notification (" CERCLA " List) : Methyl Methacrylate CAS NO : 80 - 62 - 6 RQ (Lbs) : 1000
SARA Title III: Section 311-312:	This product is considered hazardous under the OSHA Hazard Communication Standard and is regulated under Section 311-312 (40 CFR 370). Its hazard are : Immediate (acute) health, fire and reactive hazards
SARA Title III: Section 313:	This product contains chemicals regulated as Toxic Chemical under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 : Methyl Methacrylate : CAS NO : 80 - 62 - 6
TSCA Section 8(b): Inventory:	This product or its components are listed in or exempt from the TSCA inventory requirements.

State Regulations

CA Proposition 65	This product contains no hazardous substances known to the State of California to cause cancer and adverse reproductive effects.
MA Right-to-Know Law:	This product contains the following substance on the Massachusetts Substance List: Methyl Methacrylate CAS NO: 80 - 62 - 6
NJ Right-to-Know Law:	This product contains the following substance on the New Jersey Substance List: Methyl Methacrylate CAS NO : 80 - 62 - 6
PA Right-to-Know Law:	This product contains the following substance on the Pennsylvania Substance List: 2-Propenoic Acid, 2-Methyl -, Methyl Ester CAS NO: 80 - 62 - 6

International Regulations

CDSL: Canadian Inventory (on Canadian Transitional List)	DSL : Included on inventory
EINECS: European Inventory:	On inventory

Section XVI - Other Information

Hazard Rating System

NFPA: Health =3/Flammability =3/Reactivity = 0
HMIS: Health = 3/Flammability/ = 3 /Reactivity = 0

Product Number -

Approval Date:09/20/00 Reviewed July 2006, Reviewed 11/18/10

The information presented herein was obtained from sources considered to be reliable. However, this information is provided without any warranty, expressed or implied, regarding its correctness or suitability for consumers intended use and/or application. For this and other reasons, we assume no responsibility and expressly disclaim liability for loss, damage or expense arising out of any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared expressly for this product. Use the materials only as directed. If the product is used as a component of another product, the information contained within the MSDS may not be applicable. If one could have any concerns with or problems understanding this MSDS form, please direct all questions to INFOTRAC, Chemical Emergency Resources System at 1(800)535-5053.

SAFETY DATA SHEET

Sledgehammer Heat Cure Powder

Section 1. Identification

GHS product identifier : Sledgehammer Heat Cure Powder

Other means of identification : Not available.

Product code : 1000494-496, 1000498-500, 1000502-504, 1000543-545, 1001960-964

Product type : Powder.

Product use : Dental Products
Polymer

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

Not applicable.

Supplier's details : Keystone Industries
616 Hollywood Ave.
Cherry Hill, NJ 08002
(856) 663-4700

Emergency telephone number (with hours of operation) : (800) 535-5053

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : COMBUSTIBLE DUSTS
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 1B
TOXIC TO REPRODUCTION (Fertility) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 99%

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : May form combustible dust concentrations in air.
May damage the unborn child.
Suspected of damaging fertility.
Suspected of causing cancer.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing.

Response : IF exposed or concerned: Get medical attention.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements : Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.

Section 2. Hazards identification

Hazards not otherwise classified : Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

CAS number : Not applicable.

May contain one or more of the following components in quantities considered hazardous:

Ingredient name	CAS number	EC number	%
dibutyl phthalate	84-74-2	201-557-4	1 - 5
titanium dioxide	13463-67-7	236-675-5	0.1 - 1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : No known significant effects or critical hazards.

Section 4. First aid measures

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
irritation
redness

Inhalation : Adverse symptoms may include the following:
Suspected of damaging fertility.
May damage the unborn child.
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
Suspected of damaging fertility.
May damage the unborn child.

Ingestion : Adverse symptoms may include the following:
Suspected of damaging fertility.
May damage the unborn child.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical powder.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Fine dust clouds may form explosive mixtures with air.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Do not store above the following temperature: 200°C (392°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
dibutyl phthalate	**OSHA PEL 1989 (United States, 3/1989).** TWA: 5 mg/m³ 8 hours. **ACGIH TLV (United States, 4/2014).** TWA: 5 mg/m³ 8 hours. **NIOSH REL (United States, 10/2013).** TWA: 5 mg/m³ 10 hours. **OSHA PEL (United States, 2/2013).** TWA: 5 mg/m³ 8 hours.
titanium dioxide	**ACGIH TLV (United States, 4/2014).** TWA: 10 mg/m³ 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 2/2013).** TWA: 15 mg/m³ 8 hours. Form: Total dust

Appropriate engineering controls : Use only with adequate ventilation. 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.

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

Hygiene measures : 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Section 8. Exposure controls/personal protection

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. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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.

Other skin protection : 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.

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Powder.]

Color : Colored

Odor : Faint odor. [Slight]

pH : Not applicable.

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: 304°C (579.2°F) [Tagliabue.]

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : Not available.

Solubility : Insoluble in the following materials: cold water and hot water.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : 200°C (392°F)

Viscosity : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

Conditions to avoid : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dibutyl phthalate	LD50 Oral	Rat	7499 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-

Classification

Product/ingredient name	OSHA	IARC	NTP
titanium dioxide	-	2B	-

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
irritation
redness

Inhalation : Adverse symptoms may include the following:
Suspected of damaging fertility.
May damage the unborn child.
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
Suspected of damaging fertility.
May damage the unborn child.

Section 11. Toxicological information

Ingestion : Adverse symptoms may include the following:
Suspected of damaging fertility.
May damage the unborn child.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : May damage the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
dibutyl phthalate	Acute EC50 3.4 µg/l Marine water	Algae - Gymnodinium breve	96 hours
	Acute EC50 2990 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 480 µg/l Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 210 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Chronic NOEC 500 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 25 µg/l Fresh water	Fish - Danio rerio - Embryo	5 weeks
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
dibutyl phthalate	4.46	165.96	low
titanium dioxide	-	352	low

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

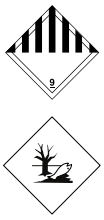
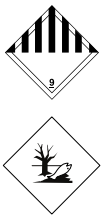
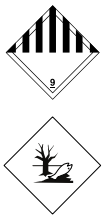
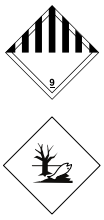
Section 13. Disposal considerations

Disposal methods : 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. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Dibutyl phthalate; 1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	Listed	U069

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN3077	Not regulated.	UN3077	UN3077	UN3077	UN3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibutyl phthalate)	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibutyl phthalate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibutyl phthalate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibutyl phthalate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibutyl phthalate)
Transport hazard class(es)	9 	-	9 	9 	9 	9 
Packing group	III	-	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.

Section 14. Transport information

Additional information	**Reportable quantity** 666.67 lbs / 302.67 kg The classification of the product is due solely to the presence of one or more US DOT-listed 'Hazardous substances' that are subject to reportable quantity requirements and only applies to shipments of packages greater than, or equal to, the product reportable quantity. Package sizes less than the product reportable quantity are not regulated as hazardous materials.	-	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. **Tunnel code** (E)	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: dibutyl phthalate

Clean Water Act (CWA) 311: dibutyl phthalate

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Section 15. Regulatory information

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
dibutyl phthalate titanium dioxide	1 - 5 0.1 - 1	No. No.	No. No.	No. No.	No. No.	Yes. Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	dibutyl phthalate	84-74-2	1 - 5
Supplier notification	dibutyl phthalate	84-74-2	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: DIBUTYL PHTHALATE

New York : The following components are listed: Di-n-butyl phthalate; 1,2-Benzenedicarboxylic acid, dibutyl ester

New Jersey : The following components are listed: DI-N-BUTYL PHTHALATE; 1, 2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER; TITANIUM DIOXIDE; TITANIUM OXIDE (TiO2)

Pennsylvania : The following components are listed: 1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER; TITANIUM OXIDE (TIO2)

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
dibutyl phthalate titanium dioxide	No. Yes.	Yes. No.	No. No.	Yes. No.

Canada inventory : All components are listed or exempted.

International regulations

Section 15. Regulatory information

International lists : **Australia inventory (AICS)**: All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): All components are listed or exempted.

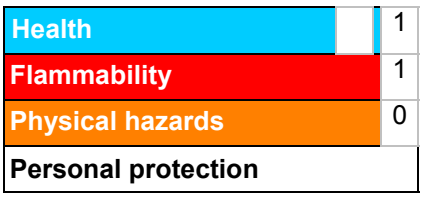
Chemical Weapons Convention List Schedule I Chemicals : Not listed

Chemical Weapons Convention List Schedule II Chemicals : Not listed

Chemical Weapons Convention List Schedule III Chemicals : Not listed

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing : 5/22/2015

Date of issue/Date of revision : 5/22/2015

Date of previous issue : 5/19/2015

Version : 2

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
Information contained within this SDS is only to be distributed as required by law.