

SAFETY DATA SHEET

Diamond D Heat Cure Liquid

Section 1. Identification

GHS product identifier	: Diamond D Heat Cure Liquid
Other means of identification	: Not available.
Product code	: 1013014, 1013015, 1013061-072, 1013112-114
Product type	: Liquid.
Product use	: Dental Products Monomer
Relevant identified uses o	f 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. Hazar	ds identification
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910 1200)

Classification of the	(29 CFR 1910.1200). : FLAMMABLE LIQUIDS - Category 2
substance or mixture	SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements	
Hazard pictograms	



Signal word	: Danger
Hazard statements	 Highly flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protecti surfaces, sparks, open flames and other ignition so proof electrical, ventilating, lighting and all material

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Section 2. Hazards identification

Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep cool.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

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	%
methyl methacrylate	80-62-6	201-297-1	75 - 100
Ethylene glycol dimethacrylate	97-90-5	202-617-2	5 - 10

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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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	:	Wash with plenty of soap and 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. In the event of any complaints or symptoms, avoid further exposure. 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 if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

Section 4. First aid measures

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 effect	ts
Eye contact	: No known significant effects or critical hazards.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympt	<u>coms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: redness irritation
Ingestion	: No specific data.
Indication of immediate med	ical 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, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide

Section 5. Fire-fighting measures

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, protec	tive 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 vapor or mist. 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 co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. 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. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.
Date of issue/Date of revision	: 9/4/2015 Date of previous issue : 4/15/2015 Version : 1 4/12

Section 7. Handling and storage

Conditions for safe storage,	: Shield UV light sources. Store in accordance with local regulations. Store in a
including any	segregated and approved area. Store in original container protected from direct sunlight
incompatibilities	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. Inhibitor requires oxygen to function. Maintain
	proper headspace and re-aerate the product by mixing every 3 months.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
Methyl methacrylate	ACGIH TLV (United States, 3/2015). Skin		
	sensitizer.		
	TWA: 50 ppm 8 hours.		
	STEL: 100 ppm 15 minutes.		
	OSHA PEL 1989 (United States, 3/1989).		
	TWA: 100 ppm 8 hours.		
	TWA: 410 mg/m ³ 8 hours.		
	NIOSH REL (United States, 10/2013).		
	TWA: 100 ppm 10 hours.		
	TWA: 410 mg/m ³ 10 hours.		
	OSHA PEL (United States, 2/2013).		
	TWA: 100 ppm 8 hours.		
	TWA: 410 mg/m ³ 8 hours.		

Appropriate engineering controls	: Use only with adequate ventilation. 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 meas	<u>ures</u>
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. 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.
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: chemical splash goggles.
Skin protection	

Section 8. Exposure controls/personal protection

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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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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, air-purifying or air-fed 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

<u>Appearance</u>				
Physical state	: Liquid. [Clear.]			
Color	Colorless			
Odor	: Characteristic. Acrid. [Strong]			
рН	: Not available.			
Melting point	: Not available.			
Boiling point	: 101°C (213.8°F)			
Flash point	: Closed cup: 20°C (68°F) [Tagliabue.]			
Evaporation rate	: <1 (butyl acetate = 1)			
Lower and upper explosive (flammable) limits	: Lower: 2% Upper: 12.5%			
Vapor pressure	: 3.6 kPa (27 mm Hg) [room temperature]			
Vapor density	: 3.45 [Air = 1]			
Relative density	: 0.95			
Solubility	: Partially soluble in the following materials: cold water and hot water.			
Solubility in water	: Not available.			
Partition coefficient: n- octanol/water	: 1.38			
Auto-ignition temperature	: 395°C (743°F)			
Viscosity	: Dynamic (room temperature): <1 mPa·s (<1 cP)			

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	: Hazardous polymerization may occur under certain conditions of storage or use. These could cause the product to polymerize exothermically. Unintentional contact with them should be avoided.

Date of previous issue

Date of issue/Date of revision

Section 10. Stability and reactivity

Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.			
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

Acut	e 1	0	xi	cit	V

Product/ingredient name	Result	Species	Dose	Exposure
Methyl methacrylate	LC50 Inhalation Vapor	Rat	78000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	7872 mg/kg	-
Ethylene glycol dimethacrylate	LD50 Oral	Rat	3300 mg/kg	-

Classification

Product/ingredient name	OSHA	IARC	NTP
Methyl methacrylate	-	3	-

Specific target organ toxicity (single exposure)

Name	• •	Route of exposure	Target organs
Methyl methacrylate	Category 3		Respiratory tract irritation
Ethylene glycol dimethacrylate	Category 3		Respiratory tract irritation

Information on the likely	: Not available.
routes of exposure	

Potential acute health effects

Eye contact	: No known significant effects or critical hazards.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Date of issue/Date of revision	: 9/4/2015 Date of previous issue : 4/15/2015	Vers				
Ingestion	: No specific data.					
Skin contact	: Adverse symptoms may include the following: redness irritation					
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing					
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness					

Section 11. Toxicological information

Delayed and immediate effect	also chronic effects from short and long term exposure	
Short term exposure		
Potential immediate effects	available.	
Potential delayed effects	available.	
<u>Long term exposure</u>		
Potential immediate effects	available.	
Potential delayed effects	available.	
Potential chronic health effe		
Not available.		
General	e sensitized, a severe allergic reaction may occur when subsequently expose / low levels.	sed to
Carcinogenicity	known significant effects or critical hazards.	
Mutagenicity	known significant effects or critical hazards.	
Teratogenicity	known significant effects or critical hazards.	
Developmental effects	known significant effects or critical hazards.	
Fertility effects	known significant effects or critical hazards.	

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	33000 mg/kg

Section 12. Ecological information

Toxicity					
Product/ingredient name	Result		Species		Exposure
Methyl methacrylate	Acute LC50 130000	µg/l Fresh water	er Fish - Pimephales promelas - Adult		96 hours
Bioaccumulative potential					
Product/ingredient name	LogPow	BCF		Potential	
Methyl methacrylate Ethylene glycol dimethacrylate	1.38 1.87			low low	

Mo	hil	itv i	in	60	
N IU	ыı	ILY		30	

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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 #		Reference number
Methyl methacrylate (I,T); 2-Propenoic acid, 2-methyl-, methyl ester (I,T)	80-62-6	Listed	U162

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN1993	UN1993	UN1993	UN1993	UN1993	UN1993
UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (methyl methacrylate)	FLAMMABLE LIQUID, N.O.S. (methyl methacrylate)	FLAMMABLE LIQUID, N.O.S. (methyl methacrylate)	FLAMMABLE LIQUID, N.O.S. (methyl methacrylate)	FLAMMABLE LIQUID, N.O.S. (methyl methacrylate)	FLAMMABLE LIQUID, N.O.S (methyl methacrylate)
Transport hazard class(es)	3	3	3	3	3	3
Packing group	11	11	11	11	11	П
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	Reportable quantity 1111.1 lbs / 504.46 kg [140. 28 gal / 531.01 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity)	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3).	-	<u>Special</u> <u>provisions</u> 640 (C) <u>Tunnel code</u> (D/E)	Emergency schedules (EmS) F-E. S-D	-

Section 14. Transport information

transportation requirements.			

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

Section 15. Regulatory information

J.S. Federal regulations	1	TSCA 8	(a) PAIR: MEH	HQ				
		TSCA 8(a) CDR Exempt/Partial exemption: Not determined						
		United S	sted or exemp	exempted.				
		Clean W	/ater Act (CW	/A) 311∷ ı	methyl methac	rylate		
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Listed						
Clean Air Act Section 602 Class I Substances	:	Not liste	d					
Clean Air Act Section 602 Class II Substances	:	Not liste	lot listed					
DEA List I Chemicals (Precursor Chemicals)	:	Not liste	d					
DEA List II Chemicals (Essential Chemicals)	:	Not liste	d					
SARA 302/304								
Composition/information	on	<u>ingredier</u>	<u>nts</u>					
No products were found.								
SARA 304 RQ	:	Not appl	icable.					
<u>SARA 311/312</u>								
Classification	:							
Composition/information	on	-						
Name			%	Fire bazard	Sudden release of	Reactive	Immediate (acute)	Delayed (chronic)

Name		hazard	Sudden release of pressure	Reactive	(acute) health	Delayed (chronic) health hazard
-	l methacrylate ne glycol dimethacrylate	Yes. No.		No. No.	Yes. Yes.	No. No.

SARA 313

Section 15. Regulatory information

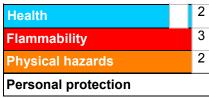
	Product name	CAS number	%
Form R - Reporting requirements	methyl methacrylate	80-62-6	75 - 100
Supplier notification	methyl methacrylate	80-62-6	75 - 100

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.

copying and redistribution of	une	e notice attached to copies of the ODO subsequently redistributed.
State regulations		
Massachusetts	1	The following components are listed: METHYL METHACRYLATE
New York	1	The following components are listed: Methyl methacrylate; 2-Propenoic acid, 2-methyl-, methyl ester
New Jersey	1	The following components are listed: METHYL METHACRYLATE; 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER
Pennsylvania	1	The following components are listed: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER
Canada inventory	1	All components are listed or exempted.
International regulations		
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.)

Section 16. Other information



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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.

<u>History</u>	
Date of printing	: 9/4/2015
Date of issue/Date of revision	: 9/4/2015
Date of previous issue	: 4/15/2015
Version	: 1
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 = International Air Transport Association IBC = 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.



SAFETY DATA SHEET

Diamond D Heat Cure Powder

Section 1. Identification

Section 1. Identi	ication
GHS product identifier	: Diamond D Heat Cure Powder
Other means of identification	: Not available.
Product code	: 1013020-1013035, 1013061-1013072, 1013112-1013114, 1013105-1013107
Product type	: Powder.
Product use	: Dental Products Polymer
Relevant identified uses of	f 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. Hazar	ds 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	<u>è</u>
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.

Date of issue/Date of revision

Section 2. Hazards identification

Hazards	not otherwise
classifie	d

: 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	<u>ects</u>						
Eye contact		Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.					
Inhalation		o airborne concentrations irritation of the nose, thro		ecommended of	exposure) limits	
Skin contact	: No known	significant effects or critic	al hazards.				
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Section 4. First aid measures

Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympto	<u>ims</u>
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, protec	tive 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 co	ntainment 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 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 13 for waste disposal.

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.
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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/m ³ 8 hours.		
	ACGIH TLV (United States, 3/2015).		
	TWA: 5 mg/m ³ 8 hours.		
	NIOSH REL (United States, 10/2013).		
	TWA: 5 mg/m ³ 10 hours.		
	OSHA PEL (United States, 2/2013).		
	TWA: 5 mg/m ³ 8 hours.		
titanium dioxide	ACGIH TLV (United States, 3/2015).		
	TWA: 10 mg/m ³ 8 hours.		
	OSHA PEL 1989 (United States, 3/1989).		
	TWA: 10 mg/m ³ 8 hours. Form: Total dust		
	OSHA PEL (United States, 2/2013).		
	TWA: 15 mg/m ³ 8 hours. Form: Total dust		

Appropriate engineering : controls	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapo or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statuto 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	:	Clear. Pink Red.
Odor	1	Faint odor. [Slight]
рН	:	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	1	Not available.
Vapor density	1	Not available.
Relative density	1	Not available.
Solubility	1	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

Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.			
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials			
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.			

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 : Not available. routes of exposure

Potential acute health	<u>effects</u>
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 effect	<u>cts</u>	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
<u>Long term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health eff	ect	<u>s</u>
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	1	No known significant effects or critical hazards.
Teratogenicity	1	May damage the unborn child.
Developmental effects	1	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	LogPow	BCF		Potential	
dibutyl phthalate titanium dioxide	4.46 -	165.96 352		low low	
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Section 12. Ecological information

Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

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 #		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	ΙΑΤΑ
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)	ENVIRONMENTALL HAZARDOUS SUBSTANCE, SOLID, N.O.S (dibutyl phthalate)
Transport hazard class(es)	9	-	9	9	9	9
Packing group	Ш	-	Ш	Ш	111	111
Environmental hazards	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.
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Section 14. Transport information

		mormati		-		
Additional	Reportable	-	The	This product is	This product is	This product is
information	<u>quantity</u>		environmentally	not regulated	not regulated	not regulated
	666.67 lbs /		hazardous	as a	as a	as a
	302.67 kg		substance	dangerous	dangerous	dangerous
	The		mark is not	good when	good when	good when
	classification of		required when	transported in	transported in	transported in
	the product is		transported in	sizes of ≤5 L or	sizes of ≤5 L or	sizes of ≤5 L or
	due solely to		sizes of ≤5 L or	l≤5 kg, provided	≤5 kg,	≤5 kg,
	the presence		≤5 kg.	the packagings	provided the	provided the
	of one or more			meet the	packagings	packagings
	US DOT-listed			general	meet the	meet the
	'Hazardous			provisions of 4.	general	general
	substances'			1.1.1, 4.1.1.2 and 4.1.1.4 to	provisions of 4. 1.1.1, 4.1.1.2	provisions of 5. 0.2.4.1, 5.0.2.6.
	that are			4.1.1.8.	and 4.1.1.4 to	1.1 and 5.0.2.8.
	subject to			4.1.1.0.	4.1.1.8.	1.1 and 5.0.2.0.
	reportable			Tunnel code	4.1.1.0.	
	quantity			(E)		
	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.					

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

Section 15. Regulatory information

U.S. Federal regulations	: TSCA 8(a)	CDR Exempt/Partial exe	emption: Not determ	nined					
	United States inventory (TSCA 8b): All components are listed or exempted.								
	Clean Wat	er Act (CWA) 307: dibuty	l phthalate						
	Clean Wate	er Act (CWA) 311: dibuty	l phthalate						
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Listed								
Clean Air Act Section 602 Class I Substances	: Not listed								
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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.
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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	1 - 5	No.	No.	No.	No.	Yes.
titanium dioxide	0.1 - 1	No.	No.	No.	No.	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	•	Maximum acceptable dosage level
dibutyl phthalate titanium dioxide	-		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.)



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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.

Date of previous issue

<u>History</u>	
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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.

V 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.