

# Material Safety Data Sheet **DIAMOND D** HEAT CURE DENTAL ACRYLIC Page 1 of 5

## Section I - Product and Company Identification

**Product Name:** DIAMOND D DENTAL ACRYLIC  
**Chemical Name:** N/A

**Manufacturer:** Keystone Industries  
616 Hollywood Ave  
Cherry Hill, NJ 08002

**Family:** Acrylic Polymer  
**Product Use:** Dental Polymer

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

**Product #** – various, beginning with 1013020

## Section II - Composition/Information on Ingredients

Chemical Identity	CAS Numbers	EINECS#	INCI Name	Exposure	Limits	Carcinogen	%
				OSHA TWA/STEL	ACGIH TWA/STEL		
Titanium Dioxide	13453-67-7	236-675-5	CI77891	15 mg/m3	10 mg/m3	Not Listed	<1
Dibenzoyl Peroxide	94-36-0	202-327-6	Benzoyl Peroxide	5 mg/m3	5 mg/m3	3/no/no	<0.2

N/E - None Established  
N/R - Not Reviewed

N/DA - No Data Available  
N/A - Not Applicable

**Hazard Symbols:** Xi

This product is not considered hazardous by OSHA Hazard Communication Standard.

**Risk Phrases:** R36/37/38

**Safety Phrases:** S18, S22, S24/25, S38

## Section III - Hazards Identification

### EMERGENCY OVERVIEW

This information is based on findings from related or similar materials.

- May cause allergic skin reaction.
- May cause eye irritation.
- Dust may cause irritation of the nose, throat, and lungs.
- This product may contain particulates, not otherwise classified (Nuisance Dust)

### 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	Effects of Acute and Chronic Over Exposure: It is not known to cause significant health problems. It is considered an inert or nuisance dust. Avoid inhalation of dust. Keep dust out of eyes to prevent possible irritation.

NOTE: Refer to Section 11, Toxicological Information for Details

## Section IV - First Aid Measures

First Aid for Eye	Flush with plenty of water for 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid if symptoms persist.
First Aid for Skin	Wash thoroughly with soap and water. Obtain medical aid if discomfort persists.
First Aid for Inhalation	In case of exposure to a high concentration of polymer dust, remove person to fresh air. If breathing has stopped, administer artificial respiration and seek medical attention.
First Aid for Ingestion	Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2 to 4 cupfuls of milk or water.

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## Section V - Fire Fighting Measures

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)
572°F/304°C (Tag Closed Cup)	LEL: 20 g/m <sup>3</sup> (dust cloud) UEL: N.A.	N/E

### Method:

Extinguishing Media:	Water spray, water foam, carbon dioxide, dry chemical.
Fire Fighting Instructions:	Avoid extinguishing methods that generate dust clouds. Water streams can disperse dust into air, producing a fire hazard and possible explosion hazard. Fire-fighters should wear self-contained breathing apparatus.
Unusual Hazards:	Polymer dust is combustible but not easily ignited. The explosive limits of the polymer particles suspended in air are approximately those of coal dust.

## 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.
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## 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 containers 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.
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### Personal Protective Equipment

General	Dust collectors are recommended for handling powder in bulk. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132), or European Standard EN166 be conducted before using this product. Provide eye wash stations and safety showers.
Eye/ Face Protection	Use safety glasses and have eye flushing equipment immediately available.
Skin Protection	Minimize contamination by following good industrial practice. Although wearing gloves is an option, wearing nitrile, neoprene, pvc, latex or other impermeable gloves is recommended.
Respiratory Protection	A NIOSH/MSHA approved air purifying respirator with a minimum rating of N95 may be permissible under certain limited circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

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## 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/A	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	392°F/200°C	N/A	N/A	N/A	N/A	N/A	insoluble

Flash Point (°F/°C)	Flammable Limit (vol%)	Auto-ignition Temperature (vol%)
580°F/304°C (Tag Closed Cup)	LEL: 20 g/m <sup>3</sup> (dust cloud) UEL: N.A.	N/E

## Section X - Stability and Reactivity

### Stability:

Stable

### Hazardous Decomposition Products:

Methyl methacrylate monomers and Carbon Dioxide

### Conditions to Avoid:

Heating above 200°C/392°F

### Incompatibility (Materials to Avoid):

Strong oxidizing agents

### Hazardous Polymerization:

will not occur

## Section XI - Toxicological Information

Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation Toxicity	Irritation - skin	Irritation - Eye
N/DA	N/DA	N/DA	mild	mild

Sensitization	Mutagenicity	Sub-chronic Toxicity
N/DA	None	None

## Section XII - Ecological Information

### Ecotoxicological Information

Acute Toxicity to Fish	Acute Toxicity to Invertebrates	Acute Toxicity to Algae	Bioconcentration	Toxicity to Sewage Bacteria
N/DA	N/DA	N/DA	N/DA	N/DA

### Chemical Fate Information

Biodegradability	N/DA
Chemical Oxygen Demand	N/DA

## Section XIII - Disposable Considerations

May be disposed of in a landfill or incinerated. Follow Federal, State and Local regulations for disposal.

## Section XIV - Transport Information

<b>DOT (49 CFR 172)</b>	
Proper Shipping Name:	Non-Regulated Material
Identification Number:	N/A
Marine Pollutant:	No
Special Provisions:	N/A

Date of Issue: 1/21/10

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<b>Emergency Response Guidebook (ERG) #:</b>	N/A
<b>IATA (DGR):</b>	
Proper Shipping Name:	Non-Regulated Material
Class or Division:	N/A
UN or ID Number:	N/A
Packaging Instructions:	
<b>Emergency Response Guidance (ICAO)#:</b>	
<b>IMO (IMDG):</b>	
Proper Shipping Name:	Non-Regulated Material
Class or Division:	N/A
UN or ID Number:	N/A
Special Provisions & Stowage/Segregation:	None
<b>Emergency Schedule (EmS)#:</b>	
<b>Other Information:</b>	<b>Flash point &gt; 100°C</b>

## Section XV - Regulatory Information

### US Federal Regulations

Clean Air Act: HAP/ODS	This product contains the following hazardous air pollutants (HAP's) or ozone depleting substances (ODS's), as defined by the U. S. Clean Air Act: <ul style="list-style-type: none"> <li>NONE</li> </ul>
Clean Water Act: Priority Pollutant	This product contains the following chemicals listed under the U.S. Clean Water Act Priority Pollutant List: <ul style="list-style-type: none"> <li>NONE</li> </ul>
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 not considered a hazardous chemical under the OSHA Hazard Communication Standard.
RCRA	This product contains no chemicals considered to be hazardous waste under RCRA (40 CFR 261).
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 no chemicals regulated under Sec. 304 as extremely hazardous chemicals for emergency release notification ("CERCLA" List).
SARA Title III: Section 311-312:	This product does not contain hazardous substances under the OSHA Hazard Communication Standard, and is not regulated under Section 311-312 (40 CFR 370).
SARA Title III: Section 313:	This product contains the following chemicals outlined in SARA Title III: Section 313: <ul style="list-style-type: none"> <li>Benzoyl Peroxide CAS #94-36-0.</li> </ul>
TSCA Section 8(b): Inventory:	This product contains chemicals listed on the TSCA inventory or otherwise complies with TSCA premanufacture notification requirements.

### State Regulations


CA Right-to-Know Law:	Benzoyl Peroxide CAS #94-36-0
MA Right-to-Know Law:	Benzoyl Peroxide CAS #94-36-0 Titanium Dioxide CAS #13453-67-7
NJ Right-to-Know Law:	Benzoyl Peroxide CAS #94-36-0 Titanium Dioxide CAS #13453-67-7
PA Right-to-Know Law:	Benzoyl Peroxide CAS #94-36-0 Titanium Dioxide CAS #13453-67-7
FL Right-to-Know Law:	Benzoyl Peroxide CAS #94-36-0
MN Right-to-Know Law:	Benzoyl Peroxide CAS #94-36-0

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Titanium Dioxide CAS #13453-67-7

## International Regulations

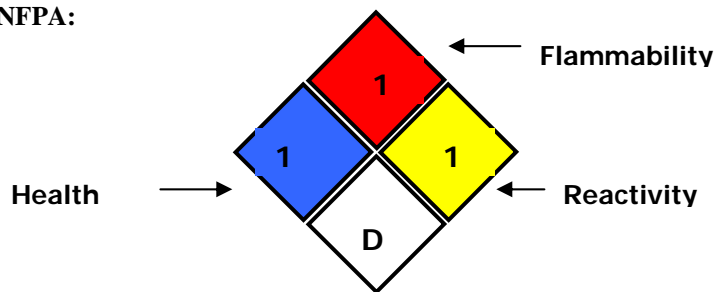
CDSL: Canadian Inventory (on Canadian Transitional List)	Benzoyl Peroxide CAS #94-36-0 is on the DSL list. WHMIS = C, D2B, B4 Titanium dioxide, CAS# 13463-67-7 is on the DSL list.
EINECS: European Inventory: 	<ul style="list-style-type: none"> <li>HAZARD SYMBOLS: <b>Xi: Irritant</b></li> <li>RISK PHRASES: <b>R36/37/38: Irritating to eyes, respiratory system and skin</b></li> <li>SAFETY PHRASES: <b>S18: Handle and open container with care, S22: do not breathe dust, S24/25: avoid contact with skin and eyes, S38: in case of insufficient ventilation, wear suitable respiratory equipment.</b></li> </ul>

## Section XVI - Other Information

### Hazard Rating System (Pictograms)

NFPA:

HMIS:



1	Health
1	Flammability
1	Reactivity
*D	

\* - Respiratory protection may be necessary depending on conditions of use. Refer to Section VIII of this MSDS for respiratory protection guidelines.

OSHA PEL for nuisance dust: 15 mg/m<sup>3</sup> (total dust)  
5 mg/m<sup>3</sup> (respirable dust)  
ACGIH PEL for nuisance dust: 10 mg/m<sup>3</sup>

MSDS prepared by	BSQ
Revised Sections since Last Version:	07/21/2003 Initial Issue
	02/23/2006 Review, no changes made.
	05/07/2007 MSDS name adjust, and section 2 update.
	11/11/2009 Section XV added Titanium Dioxide under State Regulations and noted that it is on the DSL list under International Regulations.
	1/21/2010 Section IX updated appearance as MSDS covers various colors SWR

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