

# SAFETY DATA SHEET

Issue Date 2015-07-31

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Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifiers

Product Name: Audacryl® Heat Cure Powder, Clear, Methacrylate Polymer  
Product Code: Z-640-0032

### Recommended Use of the substance or mixture and Restrictions on Use

Industrial Use Only

### Details of the Supplier of the Safety Data Sheet

#### Supplier Address

4000 Columbia Avenue  
P.O. Box 1139  
Linwood, PA 19061  
Website: www.esschem.com  
E-mail: msds@esschem.com

### Emergency Telephone Numbers

Company Phone Number: (610)-497-9000 (During Business Hours, 8:00am - 4:00pm EST)  
Emergency Telephone: CHEMTREC: 1-800-424-9300 (Outside U.S. 1-703-527-3887)

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### Hazard Class - *Physical, Health, Environmental*

	Category
Flammable Liquid	4
Eye Damage/Irritation	2B
Reproductive Toxicity	1B

### OSHA Defined Hazards

Combustible dust, may form combustible dust concentrations in air, explosion hazard

### Label Elements - Pictograms, Signal Word, Hazard Statements, Precautionary Statements, & Supplemental Information



### Signal Word

Danger

### Hazards Statements

H320 Causes eye irritation  
H360 May damage fertility or the unborn child

### Precautionary Statements - Prevention, Response, & Disposal

P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P210 Keep away from heat/sparks/open flames/hot surfaces  
– No smoking  
P235 Keep cool  
P264 Wash hands and exposed skin thoroughly after handling

P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P305+P351 +P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
P337+P313	Get medical advice/attention
P370+P378	In case of fire: Use CO2 for extinction
P405	Store locked up
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container to an authorized disposal facility

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Cas No.	Weight-%	GHS Ratings
Polymethyl Methacrylate	9011-14-7	90 — 100	Eye Damage/Irritation 2B (H320)
Dibutyl Phthalate	84-74-2	1 — 5	Reproductive Toxicity 1B (H360) Aquatic Toxicity A1 (H400)

### 4. FIRST AID MEASURES

#### General Advice

Provide the SDS to medical personnel for treatment.

#### Inhalation:

Remove victim to fresh air. Seek immediate medical attention.

#### Eye Contact:

If product gets in the eyes, flush with lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.

#### Skin Contact:

Rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.

#### Clothing:

Remove contaminated clothing, wash thoroughly before reuse.

#### Ingestion:

If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Get medical attention immediately.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Water, Chemical (alcohol-resistant) foam, dry chemical, or carbon dioxide.

**Unsuitable Extinguishing Media**

Water may not be effective in extinguishing this fire.

**Specific Hazards Arising from the Chemical**

Polymers are combustible dusts, care should be taken to avoid creating explosive concentrations in the air. Follow grounding and bonding procedures.

**Special Fire Fighting Procedures:**

Avoid extinguishing methods, which may generate dust clouds. Water stream can disperse dust into air producing a fire hazard and possible explosion hazard if exposed to ignition source. Firefighters should wear self-contained breathing apparatus.

**Protective Equipment and Precautions for Firefighters**

Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust. Polymers are sensitive to static discharge, follow grounding and bonding procedures. Polymers are not sensitive to mechanical impacts.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures****Personal Precautions**

Before cleaning any spill or leak, individuals must wear appropriate Personal Protective Equipment that is specified in section 8. Keep airborne particulates at a minimum when cleaning up spills. Deny entry to all unprotected individuals. Remove any contaminated clothing and wash thoroughly before reuse.

**Environmental Precautions**

Extinguish all ignition sources. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

**Methods and Material for Containment and Cleaning Up****Methods for Containment**

Prevent further leakage or spillage if safe to do so. Dike and contain spill with inert material (e.g. sand or earth). May contaminate water supply.

**Methods for Cleaning Up**

Maximize ventilation (open doors and windows) and secure all sources of ignition. Use good, local ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of product release. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap. Not a RCRA Hazardous waste.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling****Advice on Safe Handling**

Use in well ventilated areas. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use good personal hygiene and housekeeping. Avoid prolonged contact with the product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap and water. Do not eat, drink or smoke while handling product.

**Conditions for Safe Storage, Including any Incompatibilities****Storage Conditions**

Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of

intense heat. The temperature should remain at or under 72°F (22°C) at all times. Storing at above recommended temperature will cause product performance issues. Store in accordance with National Fire Protection Association recommendations. Observe all label precautions until the container is cleaned, reconditioned, or destroyed.

#### Incompatible Materials

Strong oxidizers, strong oxidizing agents.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Polymethyl Methacrylate 9011-14-7			
Dibutyl Phthalate 84-74-2	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA	NIOSH: 5 mg/m <sup>3</sup> TWA

#### Engineering Controls

Use local explosion-proof ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

#### Personnel Protective Equipment (PPE)

##### Respiratory Protection

A respirator should be worn whenever workplace conditions warrant use of a respirator. If dust conditions are present, a N95 respirator dust mask is required. None required if airborne concentrations are maintained below any exposure limit that may be listed above. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134 or other appropriate governing standard.

##### Eye/Face Protection

Wear safety glasses, chemical goggles when splashing is possible, when dealing with this material. If necessary, refer to U.S. OSHA 29 CFR §1910.133, or other appropriate governing standard. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

##### Skin and Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact:

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Splash contact:

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 120 min

#### General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. An eyewash station and a safety shower are recommended. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Wash hands thoroughly before eating, drinking, or smoking.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear	Physical State: Powder
Odor: Faint	Flash Point: 199 F, 93 C

<b>Flammable Limit (Air Volume%, 0% Lower/Upper)</b> <b>Evaporation Rate</b> No data available <b>Specific Gravity</b> 0	<b>Autoignition Temperature:</b> 402°C  <b>Boiling Range (low - high)</b> 340°C
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## 10. STABILITY AND REACTIVITY

### Material stability

Stable

### Incompatible materials

Strong oxidizers

### Hazardous decomposition products

Methacrylate Monomer and Oxides of Carbon when burned

### Possibility of hazardous reactions

Hazardous polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

### Mixture Toxicity

### Component Toxicity

### Routes of Exposure

Inhalation      Eye Contact      Ingestion

### Target Organs

Eyes      GI Tract      Respiratory System

### Effects of Overexposure

### Product Components Listed as Carcinogenic

CAS Number	Description	% Weight	Carcinogen Rating
None			No data available

## 12. ECOLOGICAL INFORMATION

### Component Ecotoxicity

Dibutyl Phthalate

96 Hr LC50 Pimephales promelas: 0.71 - 1.2 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 0.31 - 5.45 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: >1.24 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 1.24 - 5.3 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 1.38 - 1.74 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 0.42 - 1.28 mg/L [static]  
 48 Hr EC50 Daphnia magna: 2.99 mg/L [Static]; 48 Hr EC50 Daphnia magna: 3.4 mg/L  
 72 Hr EC50 Desmodesmus subspicatus: 1.2 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.4 mg/L [static]

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

**Disposal of Wastes**

Dispose waste material in accordance with Federal, State, and Local regulations. It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste. Comply with all applicable federal, state and local regulations. Waste disposal options include landfilling solids at permitted sites. Incinerate in a chemical incinerator equipped with an afterburner and scrubber. Use registered transporters.

**Contaminated Packaging**

Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards, due to residual flammable material, associated with empty containers. Dispose of all empty containers properly, in accordance with Federal, State and Local regulations

**14. TRANSPORT INFORMATION**

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Not Regulated, Plasticized Polymer, NOS			
IATA	Not Regulated, Plasticized Polymer, NOS			
IMDG	Not Regulated, Plasticized Polymer, NOS			

**15. REGULATORY INFORMATION****State of California Safe Drinking Water and Toxic Enforcement Act of 1986**

**(Proposition 65):** WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

84-74-2 Dibutyl Phthalate 1 to 5 % Teratogen

**SARA 313**

Dibutyl Phthalate 84-74-2

**US State Right-to-Know Regulations**

- None

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
	Canada DSL	Yes
	EINECS	Yes
	SARA Hazard categories	No
	TSCA Inventory	Yes

**16. OTHER INFORMATION****Hazardous Material Information System (HMIS)**

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

**HMIS & NFPA Hazard Rating****Legend**

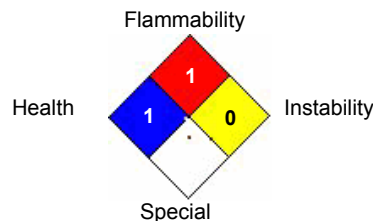
\* = Chronic Health Hazard

0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

**National Fire Protection Association (NFPA)**

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials on

in any process, unless specified in the text.