**SPI Supplies Division**
**Structure Probe, Inc**.
206 Garfield Ave., West Chester, PA 19380-4512 USA
**Phone:** 1-(610)-436-5400 **Fax:** 1-(610)-436-5755
sales@2spi.com
**http://www.2spi.com**
**Manufacturer's CAGE: 1P573**

**Safety Data Sheet**

Date Effective: October 16, 2018

SPI Catalog # 01367-AF

SPI Glass-Filled Diallyl Phthalate

## *Section 1.1: Identification*

Chemical Name/Synonyms ..... Glass-Filled Diallyl Phthalate; Diallyl Phthalate powder (Short Glass Fiber)

Product or Trade Name ..... SPI Glass-Filled Diallyl Phthalate for Metallography

CAS #'s ..... Mixture

Chemical Formula..... Mixture

## Section 1.2: Relevant Uses/Restrictions

Metallographic and general microscope applications where the embedding (for polishing) is needed for samples that are metal, ceramic or glass.

## Section 1.3: Supplier of the Safety Data Sheet

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**http://www.2spi.com**
**Manufacturer's CAGE: 1P573**

## Section 1.4: Emergency telephone number

Emergencies
Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...
Worldwide phone: 1-(703)-741-5970
Toll-free phone: 1-(800)-424-9300 USA + Canada only

## *Section 2: Hazard Identification*

**2.1 Classification of the substance**

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2B)
Acute toxicity, inhalation (Category 4)

**2.2 Label elements**

**Pictogram**

**Signal Word:** Warning

**Hazard statements:**

H315 Causes skin irritation
H319 Causes serious eye irritation
H332 Harmful if inhales

**Precautionary statements:**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash thoroughly after handling
P271 Use only outdoors or in a well-ventilated area
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
P302 + P352 IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P337 _ P313 If eye irritation persists: Get medical advice/attention
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P331 Do NOT induce vomiting
P312 Call a POISON CENTER or doctor/physician if you feel unwell
P420 Store away from incompatible materials
P501 Dispose of waste and residues in accordance with local authority requirements

**Hazard(s) not otherwise classified (HNOC):** None known

**2.3 Other Hazards:**

**Hazardous Material Information System USA (estimated)**

Health ..... 1
Fire Hazard ..... 1
Reactivity ..... 0
Personal Protection .....

**NFPA Rating (estimated)**

Health ..... 1
Flammability..... 1
Reactivity ..... 0

## *Section 3: Composition*

**3.1 Substances: Mixture**

**3.2 Mixtures:**

| Component | CAS Number | EC Number | Percentage by Weight |
|---|---|---|---|
| Diallyl Phthalate Resin | Not established | Not established | 30-40 |
| Fiberglass | 65997-17-3 | 266-046-0 | 25-45 |
| Mineral Fillers | Mixture | | 20-30 |
| Flame Retardants | Mixture | | <5 |
| Pigments | Mixture | | <5 |
| Catalysts | Mixture | | <5 |

## *Section 4: First Aid Measures*

**4.1 Description of first aid measures:**

**Inhalation:**

If inhaled, remove to fresh air.
Call a POISON CENTER or doctor/physician if you feel unwell

**Skin Contact:**

Wash off with soap and water.
If skin irritation occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.

**Eye Contact:**

Do not rub eyes.
Immediately flush eyes with plenty of water for at least 15 minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

**Ingestion:**

Do not induce vomiting.
Get medical attention if symptoms occur.

**Self-protection of the first aider:** No additional information available.

**4.2 Most important symptoms and effects, both acute and delayed:**

For toxicological information, see Section 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Provide general supportive measures and treat symptomatically.
Keep victim warm.
Keep victim under observation.

## *Section 5: Fire Fighting Measures*

**5.1 Extinguishing media:**

Water. Foam. Dry chemical powder. Carbon dioxide ($CO_2$).

**5.2 Special hazards arising from the substance or mixture:**

During fire, gases hazardous to health may be formed.

**5.3 Hazardous combustion products:**

No data available.

**5.4 Advice for firefighters:**

**Special protective equipment and precautions for firefighters:**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## *Section 6: Accidental Release Measures*

**6.1 Personal precautions:**

Keep unnecessary personnel away.
Wear appropriate protective equipment and clothing during clean-up.
Avoid inhalation of dust.
Ensure adequate ventilation.
Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

**6.2 Environmental precautions:**

Avoid discharge into drains, water courses or onto the ground.

**6.3 Methods and material for containment and cleaning up:**

Avoid dispersal of dust in the air (i.e., clearing dust with compressed air).
Sweep up or vacuum up spillage and collect in suitable container for disposal.

**6.4 Reference to other sections:**

For disposal information, see Section 13.

## *Section 7: Handling and Storage*

**7.1 Precautions for safe handling:**

Minimize dust generation and accumulation.
Provide appropriate exhaust ventilation at places where dust is formed.
Avoid breathing dust.
Avoid contact with eyes, skin, and clothing.
Avoid prolonged exposure.
Wear appropriate personal protective equipment.
Observe good industrial hygiene practices.

**7.2 Conditions for safe storage, including any incompatibilities:**

Store in original tightly closed container.
Store in a well-ventilated place.
Store away from incompatible materials (strong oxidizing agents).

**7.3 Specific end uses:**

Used for metallographic and general microscope applications where embedding (for polishing) is needed for samples that are metal, ceramic or glass
This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

## *Section 8: Exposure Controls and Personal Protection*

**8.1 Control parameter and Personal Protection:**

**Workplace exposure limits:**

| U.S.-OSHA Components | Type | Value |
|---|---|---|
| Flame Retardants (CAS mixture) | TWA | 2 mg/m$^3$ |
| Mineral Fillers (CAS mixture) | TWA | 15 mg/m$^3$ |
| Pigments (CAS Mixture) | TWA | 3.5 mg/m$^3$ |

| ACGIH Components | Type | Value |
|---|---|---|
| Flame Retardants (CAS mixture) | TWA | 2 mg/m$^3$ |
| Mineral Fillers (CAS mixture) | TWA | 10 mg/m$^3$ |
| Pigments (CAS mixture) | TWA | 3.5 mg/m$^3$ |

**U.S. ACGIH**

| Threshold Limit Values Components | Type | Value | Form |
|---|---|---|---|
| Fiberglass (CAS # 65997-17-3) | TWA | 1 fibers/cm$^3$ | Fiber |
| | | 5 mg/m$^3$ | Inhalable fraction |

**U.S Niosh: Pocket Guide to Chemcial Hazards**

| Components | Type | Value | Form |
|---|---|---|---|
| Fiberglass (CAS # 65997-17-3) | TWA | 3 fibers/cm$^3$ | Dust |
| | | 3 fibers/cm$^3$ | Fiber |
| | | 5 mg/m$^3$ | Fiber, total |
| | | 5 mg/m$^3$ | Fibers, total dust |

**Biological limit values:** No biological exposure limits noted for the ingredient(s).

**8.2 Exposure controls:**

**8.2.1 Appropriate engineering controls:**

Provide adequate general and local exhaust ventilation.
Eye wash facilities and emergency shower must be available when handling this product.

**8.2.2 Individual protection measures:**

**Eye/face protection:** Wear safety glasses with side shields (or goggle).

**Skin protection**

**Hand protection:** Wear appropriate resistant gloves.
Other: Wear appropriate chemical resistant clothing.

**Respiratory protection:** Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full face-piece, dust and mist filter.

**Thermal hazards:** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**8.2.3 Environmental exposure controls:**

Avoid discharge into drains, water courses, or onto the ground.

## *Section 9: Physical and Chemical Properties*

**9.1 Information on basic physical and chemical properties:**

**Appearance:**

Physical state: Solid

Form: Granular

Color: Varies

**Odor:** Not available

**Odor threshold:** Not available

**pH:** Not available

**Melting point/Freezing point:** 75 – 100 °C (167 – 212 °F)

**Boiling point/Boiling point range:** Not available

**Flash Point:** Not available

**Evaporation rate:** Not available

**Flammability (solid, gas):** Not available

**Upper/lower flammability or explosive limits:** Not available

**Vapor Pressure:** Not available

**Vapor density:** Not available

**Relative density:** Not available

**Solubility:** Insoluble in water

**Partition coefficient (n-octanol/water):** Not available

**Auto-ignition temperature:** Not available

**Decomposition temperature:** Not available

**Viscosity:** Not available

**Specific gravity:** 1.82 @ 15 °C (59 °F) (water = 1) estimated

**Explosive properties:** Not available

**Oxidizing Properties:** Not available

**9.2 Other information:** No further relevant information available

## *Section 10: Stability and Reactivity*

**10.1 Reactivity:** The product is stable and non-reactive under normal conditions of use, storage, and transport.

**10.2 Chemical Stability:** Material is stable under normal conditions.

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization does not occur.

**10.4 Conditions to avoid:**

Contact with incompatible materials.
Avoid dispersal of dust in air (i.e., clearing dust surfaces with compressed air).
Avoid heat, flames, and sparks.

**10.5 Incompatible materials:** Strong oxidizing agents.

**10.6 Hazardous decomposition products:** Carbon oxides. Irritating and/or toxic fumes and gases may be emitted upon exposure to high temperatures.

## *Section 11: Toxicological Information*

**Information on the likely routes of exposure:**

**Inhalation:** May cause irritation to the respiratory system.

**Skin contact:** Causes skin irritation.

**Eye contact:** Dust in the eyes will cause irritation.

**Ingestion:** Not available.

**11.1 Information on toxicological effects:**

**A. Acute toxicity:**

Harmful if inhaled. May cause upper respiratory tract irritation.

**B. Skin corrosion/irritation:**

Causes skin irritation. May cause redness and pain.

**C. Serious eye damage/irritation:**

Dust in the eyes will cause irritation.
Exposed individuals may experience eye tearing, redness, and discomfort.

**D. Respiratory or skin sensitization:**

No information available.

**E. Germ cell mutagenicity:** Not available.

**F. Carcinogenicity:** This product is not considered to be a carcinogen by IARD, ACGIH, NTP, or OSHA.

**IARC Monographs. Overall Evaluation of Carcinogenicity:**

Fiberglass (CAS 65997-17-3) 2B Possibly carcinogenic to humans
3 Not classifiable as to carcinogenicity to humans

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**U.S. National toxicology Program (NTP) Report on Carcinogens**

Fiberglass (CAS 65997-17-3) Reasonably Anticipated to be a Human Carcinogen

**G. Reproductive toxicity:** Not available.

**H. STOT-single exposure:** Not classified.

**I..STOT-repeated exposure:** Not classified.

**J. Aspiration hazard:** Not available.

**Chronic effects:** Prolonged inhalation may be harmful.

## *Section 12: Ecological Information*

**12.1 Toxicity:** No data available.

**12.2 Persistence and degradability:** No data available.

**12.3 Bio-accumulative potential:** No data available.

**12.4 Mobility in soil:** No data available.

**12.5 Results of PBT and vPvB assessment:** No data available.

**12.6 Other adverse effects:** No data available.

## *Section 13: Disposal Considerations*

**13.1 Waste treatment methods:**

**Disposal instructions:** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazardous waste code:** Not regulated.

**Additional information:** Not available.

## *Section 14: Transport Information*

**DOT:** Not regulated as dangerous goods.

**IATA:** Not regulated as dangerous goods.

**IMDG:** Not regulated as dangerous goods.

## *Section 15: Regulatory Information*

**15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture:**

**U.S. Government Regulations:**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
Not regulated

**CERCLA Hazardous Substance List (40 CFR 302.4)**
Not listed

**SARA 304 Emergency release notification**
Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**
Not listed

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories:**
Immediate Hazard – yes
Delayed Hazard – no
Fire Hazard – no
Pressure Hazard – no
Reactivity Hazard – no

**SARA 302 Extremely hazardous substance**
Not listed

**SARA 311/312 Hazardous chemical**
No

**SARA 313 (TRI reporting)**
Not regulated

**Other Federal Regulations:**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
Not regulated

**Safe Drinking Water Act (SDWA)**
Not regulated

**US State Regulations**

**US. California Controlled Substances. CA Department of Justice**
**(California health and Safety Code Section 11100)**
Not listed

**US Massachusetts RTK – Substance List**
Fiberglass (CAS # 65997-17-3)

**US New Jersey Worker and Community Right-to-Know Act**
Fiberglass (CAS # 65997-17-3)

**US Pennsylvania Worker and Community Right-to-Know Law**
Fiberglass (CAS # 65997-17-3)

**US Rhode Island RTK**
Not regulated

**US California Proposition 65**
WARNING: This product contains a chemical known to the State of California to cause cancer
US – California Proposition 6 – CRT: Listed date/Carcinogenic substance
Fiberglass (CAS 65997-17-3)

**International Inventories:**

| | |
|---|---|
| Australia | Australian Inventory of Chemcial Substances (AICS): no |
| Canada | Domestic Substances List (DSL): no |
| Canada | Non-Domestic Substances List (NSDS): no |
| China | Inventory of Existing Chemcials Substances in China (IECSC): no |
| Europe | European Inventory of Existing Commercial Chemcial Substances (EINECS): no |
| Europe | European List of Notified Chemcial Substances (ELINCS): no |
| Japan | Inventory of Existing and New Chemical Substances (ENCS): no |
| Korea | Existing Chemcials List (ECL): no |
| New Zealand | New Zealand Inventor: no |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS): no |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory: no |

- A “no” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**15.2 Chemical Safety Assessment:** Has not been carried out.

Date of Preparation: 16 October 2018

**Abbreviations and acronyms**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
CMRG: Chemical Manufacturer’s Recommended Guidelines
IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bio-accumulative and Toxicological
vPvB: very Persistent and very Bio-accumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety Health
ATE: Acute Toxicity Estimates
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
STEL: Short Term Exposure Limit
CEIL: Ceiling
TSCA: Toxic Substances Control Act (USA)
DSL: Domestic Substances List (Canada)
PICCS: Philippine Inventory of Chemicals and Chemical Substances
ENCS: Existing and New Chemical Substances (Japan)
AICS: Australian Inventory of Chemical Substances
IECSC: Inventory of Existing Chemical Substances in China
KECL: Korea Existing Chemicals List

## *Section 16: Other Information*

**Disclaimer of Liability:**

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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