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: March 21, 2018

SPI Catalog # 01090C-AB

SPI-Chem™ Positive Replicating Powder

for use with 01090-AB SPI-Chem™ Wet Surface Replica Kit

Section 1.1: Identification

Chemical Name/Synonyms Polyethylene, homopolymer; PE; Ethene, homopolymer.

Product or Trade Name SPI-Chem™ Positive Replicating Powder

CAS #'s 9002-88-4

Chemical Formula...... H(CH₂CH₂)_nH

Section 1.2: Relevant Uses/Restrictions

Replicating powder

Section 1.3: Supplier of the Safety Data Sheet

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

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

This substance is not classified as a hazardous substance or mixture.

2.2 GHS Label elements

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

Not a hazardous substance or mixture.

GHS Classification in accordance with Regulation (EC) No. 1272/2008, Annex VI

Not a hazardous substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: nine

Hazardous Material Information System USA

NFPA Rating (estimated)

Health 0
Flammability 1
Reactivity 0

Section 3: Composition

3.1 Substances:

Polyethylene homopolymer CAS # 9002-88-4 98 weight percent

No hazardous substances required for disclosure.

Section 4: First Aid Measures

4.1 Description of first aid measures:

Inhalation: If symptoms are experienced, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: In case of skin contact, wash off with plenty of soap and water. If molten material contacts the skin, immediately flush the skin with large amounts of water to cool the affected tissue and polymer. Do not attempt to peel polymer from skin. Get medical attention immediately.

Eye Contact: Wash eyes with clean low-pressure water. If irritation persists, seek medical advice.

Ingestion: Adverse health effects due to ingestion are not anticipated. If gastric irritation or discomfort persists, seek medical advice.

- 4.2 Most important symptoms and effects, both acute and delayed: No additional information available.
- **4.3 Indication of any immediate medical attention and special treatment needed:** No additional information available.

Section 5: Fire Fighting Measures

- **5.1 Extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
- **5.2 Special hazards arising from the substance or mixture:** No data available.

5.3 Advice for firefighters:

Special protective equipment and precautions for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information: No data available.

Section 6: Accidental Release Measures

6.1 Personal precautions:

Avoid dust formation.

Avoid breathing vapors, mist, or gas.

6.2 Environmental precautions:

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up:

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:

See Section 8 for personal protection.

See Section 13 for disposal information.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

7.3 Specific end uses:

Replicating powder.

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: Contains no substances with occupational exposure limit values.

Biological limit values: No additional information available.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls:

General good industrial hygiene practice.

If user operations generate dust or fumes, ventilate area to prevent accumulation.

8.2.2 Individual protection measures:

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Protective clothing such as long sleeves or a lab coat should be worn. When handling heated materials, also be sure to use heat-resistant gloves, boots, and face protection.

Inhalation: Use appropriate respiratory protection where atmosphere exceeds recommended limits for dust.

or dust.

Total Dust (PNOC): ACGIH 10 mg/M³ OSHA 15 mg/M³

Respirable Dust (PNOC): ACGIH 3 mg/M³ OSHA 5 mg/M³

8.2.3 Environmental exposure controls:

No special environmental precautions required.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance: white pellets

Odor: No data available

Odor threshold: No data available

pH: Not applicable

Melting point/Freezing point: 104-138 °C (219-280 °F) Boiling point/Boiling point range: No data available

Flash Point: No data available Evaporation rate: Not applicable

Flammability (solid, gas): No data available.

Upper/lower flammability or explosive limits: No data available.

Vapor Pressure: Not applicable
Vapor Density: No data available.
Relative Density: No data available

Water Solubility: Insoluble

Partition Coefficient (n-octanol/water): No data available

Auto-ignition temperature: 343 °C (650 °F)

Decomposition temperature: No data available

Viscosity: Not applicable

Explosive properties: No data available **Oxidizing Properties:** No data available

9.2 Other information: No additional data available.

Section 10: Stability and Reactivity

- **10.1 Reactivity:** Does not react with air, water, or other common materials.
- 10.2 Chemical Stability: This product is stable.
- 10.3 Possibility of Hazardous Reactions: No data available.
- **10.4 Conditions to avoid:** Avoid contact with strong oxidizers, excessive heat, sparks, or open flame, or dust accumulation.
- **10.5 Incompatible materials:** Chlorine, fuming nitric acid, strong oxidizing agents.
- **10.6 Hazardous decomposition products:** Not expected to decompose under normal conditions.

Section 11: Toxicological Information

Information on the likely routes of exposure:

- 11.1 Information on toxicological effects:
- **A.** Acute toxicity: No data available. Not considered to be toxic to humans or animals.
- B. Skin corrosion/irritation: No skin effects are expected from polyethylene contact.
- C. Serious eye damage/irritation: No data available.
- D. Respiratory or skin sensitization: No data available.
- E. Germ cell mutagenicity: No data available.
- F. Carcinogenicity:

Carconogenicity – Rat – Implant

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Blood: Lymphomas including Hodgkin's disease.

Tumorigenic: tumors at site of application.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

G. Reproductive toxicity: No data available.

H. STOT-single exposure: No data available.

I.. STOT-repeated exposure: No data available.

J. Aspiration hazard: No data available.

Section 12: Ecological Information

- **12.1 Exo-toxicity:** Exo-toxicity is expected to be low based on the low water solubility of polymers.
- **12.2 Persistence and degradability:** No data available.
- 12.3 Bio-accumulative potential: Not expected to occur.
- 12.4 Mobility in soil: No data available.
- **12.5 Results of PBT and vPvB assessment:** Not available as chemical safety assessment not required/ not conducted.
- 12.6 Other adverse effects: No additional relevant data available.

Section 13: Disposal Considerations

13.1 Waste treatment methods:

Product: Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging: Dispose of as unused product.

Section 14: Transport Information

DOT: Not dangerous goods.

IATA: Not dangerous goods.

IMDG: Not 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 Inventory: CAS # 9002-88-4 is listed.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards: No SARA Hazards.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

U.S. State Regulations:

State Right-to-Know Lists:

Ehene, homopolymer CAS # 9002-88-4 is listed on the Massachusetts, Pennsylvania, and

New Jersey Right-to-Know lists.

California Prop. 65 Components:

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

15.2 Chemical Safety Assessment: Has not been carried out.

Date of Preparation: 21 March 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

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.

The information and recommendations set forth above are taken from sources believed to be accurate as of the date hereof, however SPI Supplies and Structure Probe, Inc. make no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assume no liability to any user thereof. The information contained in this sheet does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. Be aware of the Structure Probe, Inc. Copyright Policy. Structure Probe, Inc. grants a nonexclusive license to make unlimited copies of this safety sheet for internal use only. Quite obviously, this information would pertain only to this material when purchased from SPI Supplies as product from other sources, with other ingredients and impurity levels could have substantially different properties.