# **SPI Supplies Division**

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

## **Safety Data Sheet**

Date Effective: February 24, 2020

SPI #'s: 01818-AB, 01819-AB Cellulose Acetate Tape SPI #'s 01856-AB, 01857-AB Cellulose Acetate Sheets

## Section 1.1: Identification

Chemical Name/Synonyms ...... Cellulose Acetate Replicating Tape or Sheets

Product or Trade Name ............. SPI Supplies® Cellulose Acetate Replicating Tape and Sheets

Chemical Family ...... Acetate

CAS #'s (As part of a polymeric film or sheet): 9035-69-2; 84-66-2

## Section 1.2: Relevant Uses/Restrictions

Used in TEM for making replicas on metals, ceramics, and other surfaces which remain inert in an acetone environment.

## Section 1.3: Supplier of the Safety Data Sheet

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# 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

#### **OSHA Hazards**

Not classified as hazardous according to OSHA>

#### **GHS Classification**

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

#### 2.2 Label elements

None known when used as directed.

**Pictogram:** None. Not considered a hazardous substance.

Signal Word: Not applicable.

#### **Hazard statements:**

None known when used as directed.

#### **Precautionary statements:**

None known when used as directed.

### 2.3 Other Hazards: None

### **Hazardous Material Information System USA**

| Health              | 1 |
|---------------------|---|
| Fire Hazard         | 1 |
| Reactivity          | 0 |
| Personal Protection |   |

## **NFPA Rating (estimated)**

| Health       | ND |
|--------------|----|
| Flammability | ND |
| Reactivity   | ND |

# Section 3: Composition

#### 3.1 Substances:

| Principle Component(s) | CAS#      | %   | OSHA PEL mg/m <sup>3</sup> | ACGIH TLV mg/m <sup>3</sup> |
|------------------------|-----------|-----|----------------------------|-----------------------------|
| *Cellulose diacetate   | 9035-69-1 | >80 | NE                         | NE                          |
| *Diethyl phthalate     | 84-66-2   | <20 | NE                         | 5                           |

<sup>\*</sup>As part of a polymeric film or sheet

# Section 4: First Aid Measures

### 4.1 Description of first aid measures:

**Inhalation:** If this occurs, contact a physician at once.

**Skin Contact:** No adverse health effects are anticipated. If, however, irritation develops, then contact a physician at once.

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

**Ingestion:** If this occurs, contact a physician at once.

- 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: Water spray, Foam, Carbon dioxide, Dry chemical.
- 5.2 Special hazards arising from the substance or mixture: No information available.
- **5.3 Hazardous combustion products:** Carbon monoxide and Carbon dioxide.
- **5.4 Advice for firefighters:** Wear a NIOSH approved positive pressure self-contained breathing apparatus.
- **5.5 Special protective equipment and precautions for firefighters:** No additional information available.

## Section 6: Accidental Release Measures

- **6.1 Personal precautions:** No information available.
- **6.2 Environmental precautions:** No information available.
- **6.3 Methods and material for containment and cleaning up:** If material is released or spilled, pick up and retain for recycle.
- **6.4 Reference to other sections:** See Section 13 for Waste Disposal information.

# Section 7: Handling and Storage

#### 7.1 Precautions for safe handling:

#### Protective measures:

No special measures required.

### Advice on general hygiene conditions:

Recommend keeping in sealed bag or container and keep dry and clean for intended use.

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

Do not store in bright sunlight.

Avoid exposure to solvent vapors.

Store at room temperature.

### 7.3 Specific end uses:

Used in TEM for making replicas on metals, ceramics, and other surfaces which remain inert in an acetone environment.

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:

Total Dust: ACGIH 10 mg/M3, OSHA 15 mg/M3

Respirable Dust: ACGIH 3 mg/M<sup>3</sup>; OSHA 5 mg/M<sup>3</sup>

Biological limit values: No data available.

#### 8.2 Exposure controls:

### 8.2.1 Appropriate engineering controls:

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

### 8.2.2 Individual protection measures:

Personal protection: Use appropriate respiratory protection where atmosphere exceeds recommended limits.

Total Dust: ACGIH 10 mg/M<sup>3</sup>, OSHA 15 mg/M<sup>3</sup> Respirable Dust: ACGIH 3 mg/M<sup>3</sup>; OSHA 5 mg/M<sup>3</sup>

Protective gloves: Wear protective gloves. Skin protection: Wear protective gloves.

Eye protection: Wear safety glasses or face shields.

Additional clothing and/or equipment: As required by user operations.

### 8.2.3 Environmental exposure controls: No data available.

# Section 9: Physical and Chemical Properties

## 9.1 Information on basic physical and chemical properties:

Appearance: Clear/transparent tape or sheet.

Odor: Slight if any.

Odor threshold: No data available.

**pH:** Not applicable.

Melting point/Freezing point: Not applicable.

Boiling point/Boiling point range: Not applicable.

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: No data available. Vapor density: No data available.

Specific Gravity ( $H_2O=1$ ): 1.31 to 1.32

**Solubility:** Insoluble in water.

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

Auto-ignition temperature: No data available. **Decomposition temperature:** No data available.

Molecular weight: Not available.

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

# Section 10: Stability and Reactivity

### 10.1 Reactivity:

No additional information available.

#### 10.2 Chemical Stability:

Stable under normal conditions.

### 10.3 Possibility of Hazardous Reactions:

Hazardous polymerization: Not applicable.

#### 10.4 Conditions to avoid:

Avoid storage in bright sunlight.

Keep away from high temperatures and open flames.

### 10.5 Incompatible materials:

Avoid exposure to solvent vapors and strong oxidizers.

#### 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide.

# Section 11: Toxicological Information

### 11.1 Information on toxicological effects:

- A. Toxicicity: Not considered toxic to humans or animals.
- B. Skin corrosion/irritation: No data.
- C. Serious eye damage/irritation: No data.
- D. Respiratory or skin sensitization: No data.
- E. Germ cell mutagenicity: No data.
- **F. Carcinogenicity:** Does not contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.
- G. Reproductive toxicity: No data.
- H. STOT-single exposure: No data.
- I. STOT-repeated exposure: No data.
- J. Aspiration hazard: No data.

# Section 12: Ecological Information

- 12.1 Toxicity: No data.
- 12.2 Persistence and degradability: No data.
- 12.3 Bio-accumulative potential: No data.
- 12.4 Mobility in soil: Ecological Impact expected to be low based on low water solubility of cellulose acetate.
- 12.5 Results of PBT and vPvB assessment: No data.
- 12.6 Other adverse effects: No information found.

# Section 13: Disposal Considerations

#### 13.1 Waste treatment methods:

RCRA 40 CFR 261 Classification: Not listed.

Federal, state, and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

# Section 14: Transport Information

**DOT:** Not regulated. **IATA:** Not regulated. **IMDG:** Not regulated.

Marine Pollutant: No

Canadian TDG: Not regulated.

# Section 15: Regulatory Information

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

### **U.S. Government Regulations:**

SDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

**SARA:** Substance is not listed.

SARA Title III: Substance is not listed.

RCRA: Not listed.

TSCA: All components of this product are listed on the TSCA Active Inventory List.

CERCLA: Diethyl phthalate (84-66-2) RQ" 1000 lbs. (454 Kg) as part of the polymer film.

#### **State Regulations:**

California Proposition 65: Substance is not listed.

State Right-to-Know Lists:

CAS # 84-66-2 is listed on the CA, MA, MN, NJ, and PA Lists.

### **International Regulations:**

Canada WHMIS: Diethyl phthalate (84-66-2) D2B and listed on the DSL List.

Europe EINECS Numbers: No Data.

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

Date of Preparation: 24 February 2020/

#### 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: Ceilina

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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