SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: SOCKETLOCK RESIN
MSDS Manufacturer Number: M040R
Manufacturer Name: ITW Polymer Technologies
Address: 130 Commerce Drive
Montgomeryville, PA 18936
General Phone Number: (215) 855-8450
Emergency Phone Number: (215) 855-8450
CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300
Canutec: In Canada, call CANUTEC: (613) 996-6666 (call collect)
MSDS Revision Date: 11/22/2010

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Ingredient Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene</td>
<td>100-42-5</td>
<td>10 - 30 by weight</td>
</tr>
<tr>
<td>Crystalline silica</td>
<td>14808-60-7</td>
<td>30 - 60 by weight</td>
</tr>
<tr>
<td>Polyester Resin</td>
<td>26098-37-3</td>
<td>10 - 30 by weight</td>
</tr>
</tbody>
</table>

SECTION 3 - HAZARDS IDENTIFICATION

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.
Potential Health Effects:
- Eye: Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.
- Skin: Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling.
- Inhalation: Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.
- Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.
Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.
Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.
Aggravation of Pre-Existing Conditions: Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.
SECTION 4 - FIRST AID MEASURES

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

**Other First Aid:** Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5 - FIRE FIGHTING MEASURES

**Flammable Properties:** Flammable.
Flammable liquid.

**Flash Point:** 90°F (32.2°C)

**Flash Point Method:** Tag closed cup (TCC)

**Auto Ignition Temperature:** 914°F

**Lower Flammable/Explosive Limit:** 1.1%

**Upper Flammable/Explosive Limit:** 6.1%

**Fire Fighting Instructions:** Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

**Extinguishing Media:** Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.

**Protective Equipment:** As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA Ratings:**

**NFPA Flammability:**

**NFPA Health:**

**NFPA Reactivity:**

**NFPA Other:**

SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personnel Precautions:** Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

**Environmental Precautions:** Avoid runoff into storm sewers, ditches, and waterways.

**Spill Cleanup Measures:** Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Collect spill with a non-sparking tool. Place into a suitable container for disposal. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue.
Flammable, eliminate ignition sources. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back. Ventilate area. Use proper personal protective equipment as listed in section 8.

**Other Precautions:** Pump or shovel to storage/salvage vessels.
SECTION 7 - HANDLING and STORAGE

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding procedures. Do not reuse containers without proper cleaning or reconditioning.

Storage: Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, direct sunlight, and incompatible substances. Keep container tightly closed when not in use.

Special Handling Procedures: Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product. Hazardous liquid or vapor residue may remain in emptied container. Do not reuse, heat, burn, pressurize, cut, weld, braze, solder; drill, grind, expose to sparks, flame, or ignition sources of empty containers without proper commercial cleaning or reconditioning.

Hygiene Practices: Wash thoroughly after handling.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin Protection Description: Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer’s data for permeability data.

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

EXPOSURE GUIDELINES

**Styrene**: 20 ppm
TLV-STEL: 40 ppm
TLV-TWA : 20 ppm

**Guideline OSHA**: 100 ppm
PEL-Ceiling/Peak: 200 ppm
PEL-Ceiling/Peak: 600 ppm Peak
PEL-TWA : 100 ppm

**Crystalline silica**: 0.025 mg/m3
TLV-TWA : 0.025 mg/m3 Respirable fraction (R)

**Guideline OSHA**: [10 mg/m3]/[(% SiO2) + 2]

**Notes**: Only established PEL and TLV values for the ingredients are listed.
SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

Physical State Appearance: liquid
Color: green
Odor: Pungent.
Boiling Point: 295°F (146.1°C)
Melting Point: Not determined.
Specific Gravity: 1.1-1.5
Solubility: negligible
Vapor Density: > 1 (air = 1)
Vapor Pressure: 4.5 mmHg @68°F
Percent Volatile: <30
Evaporation Rate: Not determined.
pH: Not applicable.
Molecular Formula: Mixture
Molecular Weight: Mixture
Flash Point: 90°F (32.2°C)
Flash Point Method: Tag closed cup (TCC)
Auto Ignition Temperature: 914°F
VOC Content: Not determined.
Percent Solids by Weight: >70

SECTION 10 - STABILITY and REACTIVITY

Chemical Stability: Unstable.
Hazardous Polymerization: Polymerization may occur under certain conditions.
Conditions to Avoid: Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

**Styrene:**

**RTECS Number:** WL3675000

**Eye:**
- Eye - Rabbit Standard Draize Test.: 100 mg
- Eye - Rabbit Standard Draize Test.: 100 mg/24H
- Eye - Human Standard Draize Test.: 50 ppm

**Skin:**
- Oral - Rat LD50: 2650 mg/kg [Behavioral - Somnolence (general depressed activity) Liver - Other changes]
- Intraperitoneal - Rat LD50: 898 mg/kg [Details of toxic effects not reported other than lethal dose value.]
- Oral - Mouse LD50: 316 mg/kg [Details of toxic effects not reported other than lethal dose value.]
- Intraperitoneal - Mouse LD50: 660 mg/kg [Details of toxic effects not reported other than lethal dose value.]
- Intravenous - Mouse LD50: 90 mg/kg [Details of toxic effects not reported other than lethal dose value.]
- Oral - Rat LD50: 5000 mg/kg [Details of toxic effects not reported other than lethal dose value.]

Administration onto the skin - Rabbit Open irritation test: 500 mg
Inhalation:
- Mouse LC50: 21000 mg/m3/2H [Details of toxic effects not reported other than lethal dose value.]
- Mouse LC50: 9500 mg/m3/4H [Details of toxic effects not reported other than lethal dose value.]
- Rat LC50: 11800 mg/m3/4H [Details of toxic effects not reported other than lethal dose value.]
- Rat LC50: 2770 ppm/4H [Details of toxic effects not reported other than lethal dose value.]
- Mouse LC50: 4940 ppm/2H [Details of toxic effects not reported other than lethal dose value.]
Ingestion:
- Oral - Rat LD50: 2650 mg/kg [Behavioral - Somnolence (general depressed activity) Liver - Other changes]
- Oral - Mouse LD50: 316 mg/kg [Details of toxic effects not reported other than lethal dose value.]
- Oral - Rat LD50: 5000 mg/kg [Details of toxic effects not reported other than lethal dose value.]
Carcinogenicity:
- IARC: Group 2B: Possibly carcinogenic to humans.

**Crystalline silica:**

RTECS Number: VV7330000

Carcinogenicity:
- IARC: Group 1: Carcinogenic to humans.
- NTP: Reasonably anticipated to be a human carcinogen.

### SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

### SECTION 13 - DISPOSAL CONSIDERATIONS

**Waste Disposal:** Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

**RCRA Number:** D001

**Important Disposal Information:** DANGER! Rags, steel wool and waste soaked with this product may spontaneously catch fire if improperly discarded or stored. To avoid a spontaneous combustion fire, immediately after use, place rags, steel wool or waste in a sealed, water-filled, metal container.

### SECTION 14 - TRANSPORT INFORMATION

**DOT Shipping Name:** Resin solution

**DOT UN Number:** 1866

**DOT Hazard Class:** 3

**DOT Packing Group:** III
### SECTION 15 - REGULATORY INFORMATION

**Styrene:**
- **TSCA Inventory Status:** Listed
- **SARA:** EPCRA - 40 CFR Part 372 - (SARA Title III) Section 313 Listed Chemical.
- **New Jersey:** Listed: NJ Hazardous List; Substance Number: 1748
- **Massachusetts:** Listed: Massachusetts Oil and Hazardous List
- **Pennsylvania:** Listed
- **Canada DSL:** Listed

**Crystalline silica:**
- **TSCA Inventory Status:** Listed
- **Massachusetts:** Listed
- **Pennsylvania:** Listed
- **Canada DSL:** Listed

**Polyester Resin:**
- **TSCA Inventory Status:** Listed
- **Canada DSL:** Listed
- **Canadian Regulations:** WHMIS Hazard Class(es): B2; D2A; D2B;

**WHMIS Pictograms**

![Pictogram](image)

### SECTION 16 - ADDITIONAL INFORMATION

- **HMIS Fire Hazard:** 3
- **HMIS Health Hazard:** 2
- **HMIS Reactivity:** 2
- **HMIS Personal Protection:** X
- **MSDS Revision Date:** 11/22/2010
- **MSDS Revision Notes:** Product Code Change
- **MSDS Author:** Actio Corporation

**Disclaimer:**
This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.