1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Energy Saver Fabric Adhesive  
**Product Type:** Adhesive  
**Restriction of use:** None identified  
**Company Address:**  
Silvercote  
25 Logue Ct  
Greenville SC 29615  
**Region:** United States  
**Contact Information:**  
1) TRANSPORT EMERGENCIES:  
CHEMTREC USA:  
800-424-9300 (24 hours)  
CHEMTREC International:  
703-527-3887 (call collect)  
Internet: www.Silvercote.com

2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**
DANGER: HIGHLY FLAMMABLE LIQUID AND VAPOR.  
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.  
CAUSES SKIN IRRITATION.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.  
SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.  
CAUSES DAMAGE TO ORGANS.  
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

**HAZARD CLASS**  
**HAZARD CATEGORY**  
**PICTOGRAM(S)**

<table>
<thead>
<tr>
<th>HAZARD CLASS</th>
<th>HAZARD CATEGORY</th>
<th>PICTOGRAM(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABLE LIQUID</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>SKIN IRRITATION</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EYE IRRITATION</td>
<td>2A</td>
<td></td>
</tr>
<tr>
<td>SKIN SENSITIZATION</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>REPRODUCTIVE TOXICITY</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ASPIRATION HAZARD</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**PRECAUTIONARY STATEMENTS**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use nonsparking tools. Take action to prevent static discharges. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection.

**Response:** IF SWALLOWED: Immediately call a physician or poison control center. If on skin (or hair): Take off immediately all contaminated clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed: Call a poison center or physician. Do NOT induce vomiting. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

**Storage:** Store in a well-ventilated place. Keep cool. Store locked up.

**Disposal:** Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENT(S)</th>
<th>CAS NUMBER</th>
<th>PERCENTAGE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>30-60</td>
</tr>
<tr>
<td>Modified rosin ester</td>
<td>Unknown</td>
<td>5-10</td>
</tr>
<tr>
<td>Heptane, branched, cyclic and linear</td>
<td>426260-76-6</td>
<td>5-10</td>
</tr>
<tr>
<td>Tris(nonylphenyl) phosphite</td>
<td>26523-78-4</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

*Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention.

Eye contact: Check for and remove any contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Ingestion If material is ingested, immediately contact a physician or poison control center. DO NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, prevent aspiration by keeping the patient's head below the knees. Never give anything by mouth to an unconscious person.

Symptoms: See Section 11.

5. FIREFIGHTING MEASURES

Extinguishing media: Use extinguishing measures appropriate to local circumstances and the surrounding environment. Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turnout gear. Isolate area. Keep unnecessary personnel away.

Unusual fire or explosion hazards: Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

Hazardous combustion products: Irritating and toxic gases or fumes may be released during a fire. Oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system.

Clean-up methods: Isolate area. Keep unnecessary personnel away. Eliminate all ignition sources (flames, hot surfaces, and sources of electrical, static or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams and groundwater with spilled material or used absorbent.
7. Handling and storage

Handling: Make sure containers are properly grounded before use or transfer of material. Keep container closed. Do not breathe gas/fumes/vapor/spray. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not taste or swallow. Do not handle or store near an open flame, heat or other sources of ignition. “Empty” containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Ground and bond metal containers for liquid transfer to avoid static sparks.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. Exposure controls/personal protection

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>20 ppm TWA</td>
<td>200 ppm TWA; 300 ppm Ceiling; 500 ppm Max, Conc. 10 minutes</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Modified rosin ester</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Heptane, branched, cyclic and linear</td>
<td>400 ppm TWA; 500 ppm STEL</td>
<td>500 ppm (2,000 mg/m³) PEL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Tris(nonylphenyl) phosphate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering controls: Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

Respiratory protection: Do not inhale vapors and fumes. Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

Skin protection: Use impermeable gloves and protective clothing as necessary to prevent skin contact. Safety showers and eye wash stations should be available.
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Amber
Odor: Hydrocarbon-like, Solvent
Odor threshold: Not available
pH: Not applicable
Vapor pressure: Not available
Boiling point/range: > 60 - < 100 °C (> 140°F - < 212°F)
Melting point/range: Not available
Specific gravity: 0.91
Vapor density: Heavier than air
Flash point: < -6.67° C (< 19.99° F) Cleveland open cup
Flammable/Explosive limits - lower: 1.2 % (Toluene)
Flammable/Explosive limits - upper: 7.1 % (Toluene)
Autoignition temperature: Not available
Evaporation rate: Not available
Solubility in water: Insoluble
Partition coefficient (n-octanol/water): Not available
VOC content: 41.77 % (calculated)
Viscosity: Not available
Decomposition temperature: Not available

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.
Hazardous reactions: None expected.
Hazardous decomposition products: Irritating and toxic gases or fumes may be released during a fire. Oxides of carbon.
Incompatible materials: Strong acids, alkalies and oxidizing agents.
Reactivity: This product may react with strong acids, bases and oxidizing agents.
Conditions to avoid: Heat, flames, sparks and other sources of ignition. Take measures to prevent the build-up of electrostatic charges.
11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, inhalation, eyes, ingestion

Potential Health Effects/Symptoms

Skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause allergic skin reaction in susceptible individuals.

Inhalation: Causes respiratory tract irritation. The solvent vapors can be harmful and cause headache, nausea, and intoxication. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Chronic exposure to toluene may have effects on the central nervous system and these effects may progress to be irreversible. Intentional misuse of toluene has resulted in reproductive effects including physical and developmental abnormalities.

Eye contact: Causes eye irritation. Prolonged eye contact may cause severe eye damage.

Ingestion: Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed. Aspirated material can enter the lungs and result in pneumonitis. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision.

<table>
<thead>
<tr>
<th>HAZARDOUS COMPONENT(S)</th>
<th>LD50S AND LC50S</th>
<th>IMMEDIATE AND DELAYED HEALTH EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>Oral LD50 (RAT) = 2.6 g/kg&lt;br&gt;Oral LD50 (RAT) = 5,000 mg/kg&lt;br&gt;Dermal LD50 (RABBIT) = 12,124 mg/kg&lt;br&gt;Inhalation LC50 (RAT, 4 h) = 8000 ppm</td>
<td>Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant</td>
</tr>
<tr>
<td>Modified rosin ester</td>
<td>None</td>
<td>No data</td>
</tr>
<tr>
<td>Heptane, branched, cyclic and linear</td>
<td>None</td>
<td>Irritant, Central nervous system</td>
</tr>
<tr>
<td>Tris(nonylphenyl) phosphite</td>
<td>None</td>
<td>No Target Organs</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information

No specific studies have been conducted by Silvercote on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.
13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable federal, state and/or local regulations must be followed during treatment, storage, or disposal of waste containing this product. Empty containers must be handled with care due to product residue.

Hazardous waste number: D001: Ignitable

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

- Proper shipping name: Adhesives
- Hazard class or division: 3
- Identification number: UN 1133
- Packing group: II

International Air Transportation (ICAO/IATA)

- Proper shipping name: Adhesives
- Hazard class or division: 3
- Identification number: UN 1133
- Packing group: II

Water Transportation (IMO/IMDG)

- Proper shipping name: ADHESIVES (Heptanes)
- Hazard class or division: 3
- Identification number: UN 1133
- Packing group: II
- Marine pollutant: Heptanes
15. REGULATORY INFORMATION

United States Regulatory Information:
- TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
- TSCA 12 (b) Export Notification: None above reporting de minimis.
- CERCLA/SARA Section 302 EHS: None above reporting de minimis.
- CERCLA/SARA Section 311/312: Fire, Immediate Health, Delayed Health
- CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Toluene (CAS# 108-88-3).
- CERCLA Reportable quantity: Toluene (CAS# 108-88-3) 1,000 lbs. (454 kg)
- California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information:
- CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous versions in sections: 2, 3, 8, 11, 15.

Prepared by: Product Safety and Regulatory Affairs
Issue date: 10/11/2017

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