Crown Tuff-Strip Semi-Paste Remover
SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier: Crown Tuff-Strip Semi-Paste Remover

Manufacturer Name: Packaging Service Co., Inc.
Address: 1904 Mykawa Road
P.O. Box 875
Pearland, TX 77581
Telephone number: 1-281-485-1458

Emergency phone number:: CHEMTREC: 1-800-424-9300 (USA)
CANUTEC: 1-613-996-6666 (Canada)

Recommended use: Paint Stripper
Restrictions on use: Use only as directed.

Date of Preparation: July 21, 2014

2. HAZARD(S) IDENTIFICATION

Classification:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Liquid Category 3</td>
<td>Acute Toxicity Oral Category 4</td>
</tr>
<tr>
<td></td>
<td>Skin Irritation Category 2</td>
</tr>
<tr>
<td></td>
<td>Eye Irritation Category 2A</td>
</tr>
<tr>
<td></td>
<td>Aspiration Toxicity Category 1</td>
</tr>
<tr>
<td></td>
<td>Carcinogen Category 1B</td>
</tr>
<tr>
<td></td>
<td>Reproductive Toxicity Category 2</td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicity – Single Exposure Category 1</td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicity – Single Exposure Category 3 (CNS effects)</td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicity – Repeat Exposure Category 2</td>
</tr>
</tbody>
</table>

Warning!

Hazard statement(s)
- Flammable liquid and vapor.
- Harmful if swallowed.
- Causes skin irritation.
- Causes serious eye irritation.
- May be fatal if swallowed and enters airways.

Precautionary statement(s)
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep away from heat, sparks, and open flames. – No smoking.
May cause cancer.  
Suspected of damaging the unborn child.  
Causes damage to optic nerve and central nervous system by ingestion.  
May cause drowsiness or dizziness.  
May cause damage to central nervous system through prolonged or repeated exposure.

Keep container tightly closed.  
Ground and bond container and receiving equipment.  
Use explosion-proof electrical and ventilating equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe mist, vapors or spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves, eye protection and face protection.  
Use only outdoors or in a well-ventilated area.  
IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical attention.  
IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water or shower.  
If skin irritation occurs: Get medical attention.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
Do NOT induce vomiting.  
Rinse mouth.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 
Call a POISON CENTER or doctor if you feel unwell.  
IF exposed: Call a POISON CENTER or doctor. 
In case of fire: Use carbon dioxide, dry chemical or foam for extinction.  
Store locked up.  
Store in a well-ventilated place. Keep cool. Keep container tightly closed.  
Dispose of contents and container in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene Chloride</td>
<td>75-09-2</td>
<td>65-75%</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>10-20%</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>1-5%</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>1-5%</td>
</tr>
<tr>
<td>Medium Aliphatic Naphtha</td>
<td>64742-88-7</td>
<td>1-5%</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>1-5%</td>
</tr>
<tr>
<td>Mineral Spirits</td>
<td>8052-41-3</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.
4. FIRST-AID MEASURES

**Inhalation:** Remove victim to fresh air. If irritation occurs or breathing is difficult, get medical attention.

**Skin contact:** Remove contaminated clothing. Wash skin with soap and water. If irritation develops, get medical attention. Launder clothing before reuse.

**Eye contact:** Immediately flush eyes with water for 15 minutes while lifting the upper and lower lids. Get medical attention if irritation persists.

**Ingestion:** DO NOT induce vomiting. Never give anything by mouth to a person who is unconscious or convulsing. Get immediate medical attention.

**Most important symptoms/effects, acute and delayed:** Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, drowsiness, nausea and unconsciousness. Harmful or fatal and may cause blindness if swallowed. Aspiration hazard – may be harmful or fatal if aspirated into the lungs during swallowing or vomiting. Overexposure may cause heart, liver, kidney, blood system and nervous system damage. Methylene chloride is converted to carbon monoxide in the body which may worsen heart disease. May cause cancer. This product contains methylene chloride which is suspected of causing cancer. The risk of cancer depends on the level and duration of exposure. May cause adverse effects on the unborn child.

**Indication of immediate medical attention and special treatment, if necessary:** Get immediate medical attention if ingested.

5. FIRE-FIGHTING MEASURES

**Extinguishing media:** Use carbon dioxide, dry chemical or foam to extinguish a fire.

**Specific hazards arising from the chemical:** This product is flammable. Vapors form explosive mixtures with air in confined or poorly ventilated areas. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Decomposition products are toxic.

**Special protective equipment and precautions for fire-fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for all fires involving chemicals. Cool fire exposure containers with water.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Evacuate spill area and keep unprotected personnel away. Remove all sources of ignition. Ventilate area with explosion proof equipment. Wear appropriate protective clothing.

**Environmental Precautions:** Avoid contamination of soil, surface water and ground water. Prevent spill from entering sewers and water courses. Report releases as required by local and national authorities.

**Methods and materials for containment and cleaning up:** Absorb with inert absorbent. Please in a suitable container for disposal. Do not flush to sewer! Report releases as required by local, state and federal authorities.
7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Use only with appropriate protective equipment and adequate ventilation. Immediately remove and launder contaminated clothing before re-use. Wash thoroughly after handling and before eating, drinking, smoking or using toilet facilities. Avoid use where carbon monoxide may be present (i.e. garages, loading docks). Keep away from heat, direct sunlight and all sources of ignition.

Refer to OSHA 1910.1052 for requirements for handling and use of methylene chloride.

Conditions for safe storage, including any incompatibilities: Protect containers from physical damage. Store in a cool, well ventilated area away from ignition sources and incompatible materials. Protect from physical damage. Store locked up.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Exposure Guidelines</th>
</tr>
</thead>
</table>
| Methylene Chloride (Dichloromethane) | 25 ppm TWA OSHA PEL  
125 ppm STEL OSHA PEL  
50 ppm TWA ACGIH TLV |
| Methanol                      | 200 ppm TWA OSHA PEL  
200 ppm TWA ACGIH TLV  
250 ppm STEL ACGIH TLV |
| Acetone                       | 1000 ppm TWA OSHA PEL  
500 ppm TWA ACGIH TLV  
750 ppm STEL ACGIH TLV |
| Toluene                       | 200 ppm TWA OSHA PEL  
300 ppm Ceiling OSHA PEL  
500 ppm Peak OSHA PEL  
20 ppm TWA ACGIH TLV |
| Medium Aliphatic Naphtha      | 500 ppm TWA OSHA PEL  
100 ppm TWA ACGIH TLV |
| Isopropanol                   | 400 ppm TWA OSHA PEL  
200 ppm TWA ACGIH TLV  
400 ppm STEL ACGIH TLV |
| Mineral Spirits               | 500 ppm TWA OSHA PEL  
100 ppm TWA ACGIH TLV |

Appropriate engineering controls: Use with adequate ventilation (equivalent to outdoors) to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required. Open doors and use fans to achieve good air movement. If possible, use local exhaust to remove vapors.

Individual protection measures:

Respiratory protection: If exposure limits are exceeded or symptoms develop, a NIOSH approved respirator with organic vapor cartridges or supplied air respirator is recommended. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Skin protection: Impervious gloves recommended if contact is possible.

Eye protection: Chemical safety goggles recommended if splashing is possible.
Other: Suitable washing and eye flushing facilities should be available in the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Thick white liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Ketone</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>102-388°F / 38-197°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;105°F (&gt;40°C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>VOC</td>
<td>99.9% (Calculated by CARB Method)</td>
</tr>
<tr>
<td>Flammable limits: LEL</td>
<td>Not available</td>
</tr>
<tr>
<td>UEL</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>278 mmHg @ 20°C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>2.3</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.181</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>533°F (278°C)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.
Chemical stability: Stable.
Possibility of hazardous reactions: None known.
Conditions to avoid: Heat, sparks, and flames.
Incompatible materials: Strong oxidizing agents, bases, amines, chemically active metals, including aluminum, magnesium, potassium and sodium.
Hazardous decomposition products: Thermal decomposition may yield carbon monoxide, carbon dioxide, chlorine, phosgene, and hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Acute effects of exposure:
Inhalation: Inhalation of vapors or mists may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness, giddiness, intoxication, tingling, numbness and shooting pains in the hands and arms, nausea, incoordination, drunkenness, stupor, irregular heartbeat. Overexposure may cause cardiac sensitization and increased risk of cardiac arrest, blurred vision, blindness, adverse effects on the lungs, liver, kidney, nervous system and other internal organs, coma or death. Carboxyhemoglobin levels can be elevated in persons exposed to methylene chloride causing stress on the cardiovascular system. Alcohol consumption may increase adverse effects.
Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation, visual disturbances and nervous system depression with symptoms of headache, dizziness, nausea, vomiting, weakness, fatigue, leg cramps, restlessness, confusion, drunken behavior, narcosis, and unconsciousness. Alcohol consumed before or after exposure may increase adverse effects. Aspiration into the lungs during ingestion or vomiting may cause serious lung damage which may be fatal. Methanol is very slowly eliminated from the body. Ingestion of methanol may cause nervous system effects, blurred vision, changes in color perception, blindness, coma and death.
Skin contact: May cause irritation with redness and itching. The liquid may be absorbed through the skin causing effects similar to those described under inhalation and ingestion.
Eye contact: May cause irritation with redness, tearing and pain.
Chronic Effects: Prolonged occupational overexposure may cause effects on vision and damage to the kidneys, liver, lungs and cardiovascular system. Prolonged intentional abuse may damage many organ systems including central and peripheral nervous systems, vision, liver, kidneys, lymphoid system, heart and blood. Exposure to toluene along with high noise levels may cause accelerated hearing loss.

Sensitization: Not expected to cause sensitization.

Germ Cell Mutagenicity: None of the components have been shown to cause germ cell mutagenicity.

Reproductive Toxicity: Methylene chloride has been shown to cause reproductive toxicity and/or birth defects only at doses that produce significant toxicity in the parent animal. Toluene exposure may cause adverse reproductive effects and harm to the unborn child.

Carcinogenicity: Methylene chloride has been listed as "possibly carcinogenic to humans" (Group 2B) by IARC, "reasonably anticipated to be a human carcinogen" (R) by NTP, “confirmed animal carcinogen with unknown relevance to humans” (A3) by ACGIH and as a carcinogen by OSHA. None of the other components are listed as carcinogens or suspected carcinogens by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values:

ATE<sub>max</sub>: Oral LD50 724.6 mg/kg; Inhalation LC50 21.74 mg/l, Dermal LD50 2173.9 mg/kg  
Methylene Chloride: Oral rat LD50 >2000 mg/kg; Inhalation mouse LC50 86 mg/L/4 hr; Skin rat LD50>2000 mg/kg.  
Methanol: Oral rat LD50 >2528 mg/kg; Skin rabbit 17,100 mg/kg  
Acetone: Oral rat LD50 5800 mg/kg  
Toluene: Oral rat LD50 >5000 mg/kg; Inhalation rat LC50 31 mg/L/4 hr; Skin rabbit 12124 mg/kg  
Isopropanol: Oral rat LD50 5840 mg/kg; Inhalation rat LC50 >10,000 ppm; Skin rabbit 16.4 mL/kg

12. ECOLOGICAL INFORMATION

This product may be harmful to aquatic organisms according to the GHS criteria.

Ecotoxicity values:  
Methylene Chloride: 96 hr LC50 Pimephales promelas (fathead minnows) 196 mg/l; 48 hr LC50 daphnia magna 27 mg/L  
Methanol: 96 hr LC50 Lepomis macrochirus (Bluegill) 15,400 mg/L; 48 hr LC50 Ceriodaphnia dubia 11 mg/L  
Toluene: 96 hr LC50 fish 1-10 mg/L; 96 hr LC50 daphnia magna 10-100 mg/L; 3 hr EC50 fresh water algae 134 mg/L

Persistence and degradability: Methylene chloride is readily biodegradable (92% in less than 7days.  
Methanol, toluene, isopropanol and acetone are readily biodegradable.

Bioaccumulative potential: Methylene chloride has an estimated BCF of 2 which suggests the potential for bioaccumulation in aquatic organisms is low. Toluene has the following BCF: 13.2 (Anguilla japonica, eels); 1.67 (Tapes semidecussata, Manila clam); 4.2 (Mytilus edulis, mussel); 380 (Chorella fusca, algae); 90 (golden ide fish).

Mobility in soil: Methylene chloride is expected to have a high mobility in soil.

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations.
14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Proper shipping name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
<th>Environmental Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>Flammable liquid, toxic, n.o.s. (Methylene Chloride, Methanol)</td>
<td>3 (6.1)</td>
<td>III</td>
<td>No</td>
</tr>
<tr>
<td>TDG</td>
<td>Flammable liquid, toxic, n.o.s. (Methylene Chloride, Methanol)</td>
<td>3 (6.1)</td>
<td>III</td>
<td>No</td>
</tr>
<tr>
<td>IMDG</td>
<td>Flammable liquid, toxic, n.o.s. (Methylene Chloride, Methanol)</td>
<td>3 (6.1)</td>
<td>III</td>
<td>No</td>
</tr>
<tr>
<td>IATA</td>
<td>Flammable liquid, toxic, n.o.s. (Methylene Chloride, Methanol)</td>
<td>3 (6.1)</td>
<td>III</td>
<td>No</td>
</tr>
</tbody>
</table>

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known.

15. REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA: This product has a Reportable Quantity (RQ) of 1330 lbs. based on the RQ for methylene chloride of 1,000 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health, Chronic Health, Fire Hazard
EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloromethane</td>
<td>75-09-2</td>
<td>65-75%</td>
</tr>
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<td>Methanol</td>
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<td>10-20%</td>
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<td>Toluene</td>
<td>108-88-3</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

EPA TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

California Proposition 65: Warning: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CANADA:
Canadian CEPA: All the components of this product are listed on the Canadian DSL.
Canadian WHMIS Classification: Class B Division 3 (Combustible liquid), Class D Division 2A (Very toxic material causing other chronic effects), Class D Division 2B (Toxic material causing other chronic effects)
This product has been classified under the CPR and this SDS discloses information elements required by the CPR.

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Rating</th>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2*</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**SDS Revision History:** New SDS  
**Date of preparation:** July 21, 2014  
**Date of last revision:** Not applicable