SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Address:
8125 Cobb Center Drive
Kennesaw, GA  30152

Product Information: 800-TECH-401   Emergency: (Chemtrec) 800-424-9300
Customer Service: 800-645-5244   Revision Date: February 10, 2007

Product Identification

**FLUX-OFF® NO CLEAN PLUS**

Product Code: ES196, ES596

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Wt. % Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isohexane, a mixture of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-methylpentane</td>
<td>107-83-5</td>
<td>1.0-25.0</td>
</tr>
<tr>
<td>3-methylpentane</td>
<td>96-14-0</td>
<td>1.0-25.0</td>
</tr>
<tr>
<td>2,3-Dimethylbutane</td>
<td>79-29-8</td>
<td>1.0-25.0</td>
</tr>
<tr>
<td>2,2-Dimethylbutane</td>
<td>75-83-2</td>
<td>1.0-25.0</td>
</tr>
<tr>
<td>n-hexane</td>
<td>110-54-3</td>
<td>0.1-2.0</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>10.0-20.0</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>1.0-2.0</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview: Clear, colorless liquid with mild hydrocarbon solvent. This product is extremely flammable. Liquid may irritate eyes and skin under repeated or prolonged exposure. Breathing high concentrations of product may produce drowsiness and a headache.

Potential Health Effects:
- **Eyes:** Liquid, aerosols and vapors of this product may be irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation.
- **Skin:** Contact causes skin irritation.
- **Ingestion:** Harmful if swallowed. Irritating to the mouth, throat and stomach. May cause vomiting. **Inhalation:** Harmful if inhaled. High concentrations in immediate area can displace oxygen and cause dizziness, unconsciousness and even death with longer exposure. Keep people away from such vapors without self-contained breathing apparatus. Pre-Existing Medical Conditions Aggravated by Exposure: Heart, lung, skin, eye.

SECTION 4: FIRST AID MEASURES

- **Eyes:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel if irritation develops or persists.
- **Skin:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.
- **Ingestion:** If swallowed, do not induce vomiting. Keep head below knees to minimize chance of aspirating material into the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- **Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

- **Flash Point:** -20 F (-29C) (isohexane)  
  **TCC LEL/UEL:** 1.2/7.7 (% by volume in air)
- **Extinguishing Media:** Use alcohol foam, carbon dioxide or water spray when fighting fires involving this material. **Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus (pressure demand, MSHA/NIOSH approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **Large Spills:** Shut off leak if possible and safe to do so. Wear self-contained breathing apparatus and appropriate personal protective equipment. Absorb spill with inert material (i.e. dry sand or earth), then place in a chemical waste container for proper disposal. Do not flush to sewer. Avoid runoff into storm sewers and ditches that lead to waterways. **Small Spills:** Absorb spill with inert material (i.e. dry sand or earth), then place in a chemical waste container for proper disposal.

SECTION 7: HANDLING AND STORAGE

Avoid prolonged or repeated contact with skin, eyes or clothing. Wash hands before eating. Use with adequate ventilation. Avoid breathing product vapor. Do not reuse this container. Store in a cool dry place, away from heat, sparks or flames. Ground and bond containers when transferring liquid. Keep container tightly closed when not in use. Do not store in direct sunlight.

KEEP OUT OF REACH OF CHILDREN.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- **Exposure Guidelines:**

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>ACGIH STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methylpentane</td>
<td>500 ppm</td>
<td>NA</td>
<td>100 ppm</td>
</tr>
<tr>
<td>3-methylpentane</td>
<td>500 ppm</td>
<td>NA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>2,3-Dimethylbutane</td>
<td>500 ppm</td>
<td>NA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>2,2-Dimethylbutane</td>
<td>500 ppm</td>
<td>NA</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>50 ppm</td>
<td>500 ppm</td>
<td>NA</td>
</tr>
<tr>
<td>Acetone</td>
<td>500 ppm</td>
<td>1000 ppm</td>
<td>750 ppm</td>
</tr>
<tr>
<td>Methanol</td>
<td>200 ppm</td>
<td>200 ppm</td>
<td></td>
</tr>
</tbody>
</table>

- **Work/Hygienic Practices:** Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. If vapor concentration exceeds TLV, use NIOSH approved organic vapor cartridge respirator. Wear safety glasses with side shields (or goggles) and rubber or other chemically resistant gloves when handling this material.
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear, colorless liquid
Odor: Mild hydrocarbon solvent
pH: NA
Vapor Pressure: 214 mm Hg @ 68 F (liquid)
Specific Gravity: 0.71 @ 68F
Evaporation Rate: >1 (Butyl acetate=1)
Solubility in Water: Negligible
Percent Volatile: 100

SECTION 10: STABILITY AND REACTIVITY

Stability: This product is stable.
Conditions to Avoid: Do not spray near open flames, red hot surfaces or other sources of ignition.
Incompatibility: Do not mix powdered alkali and alkaline earth metals or strong oxidizing agents.
Products of Decomposition: Thermal decomposition may release carbon monoxide, carbon dioxide and incompletely burned hydrocarbons.
Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation: acetone LC50 rats 50,100 mg/m3/8hr
methanol LC50 rats 64,000ppm/4hr
Skin: acetone Rabbit  MLD
methanol 20mg/24 hr
Ingestion: acetone LD50 5800 mg/kg
methanol LD50 rats 5,628 mg/kg
Eyes: acetone 20 mg/rabbit SEV
methanol 40 mg/rabbit MOD
Cancer Information: No ingredients listed as human carcinogens by NTP or IARC
Reproductive effects: none
Teratogenic effects: none
Mutagenic effects: none

SECTION 12: ECOLOGICAL INFORMATION

Environmental Impact Information
Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

REPORTING
US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is: 1-800-424-8802

SECTION 13: DISPOSAL CONSIDERATIONS
Dispose of in accordance with all federal, state and local regulations.

SECTION 14: TRANSPORTATION INFORMATION

Shipping Name UN Number Class Risk Group Label Instr. Quantity
Air: Flammable Liquid n.o.s. UN 1993 3 NA II Flammable 305/ 5L/
(Gal) 307 60 L
Ground: Flammable Liquid n.o.s. UN 1993 3 NA II Flammable --------
(Isohexane) Liquid Pkg. Auth. 173.202

SECTION 15: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION
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 (40CFR372). This information should be included on all MSDSs copied and distributed for this material.
Chemical Name CAS No. Wt. % Range
n-hexane 110-54-3 0.1-3.0
methanol 67-56-1 1.0-2.0

WHMIS: Class B2; Class D2B
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION
Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.