Material Safety Data Sheet

Product No. 70F

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: Liquid Pre-Buff Cleaner, Pressurized
Product Use: Cleaner
MSDS Preparation Date: 8/20/2008
Manufacturer: REMA TIP TOP/NO. AMERICA, 119 Roodland Avenue, Northvale, NJ 07647
24-Hour Emergency Phone Number: 800-424-9300 (CHEMTREC)

2. PRODUCT INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>% RANGE</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane (n-)</td>
<td>142-82-5</td>
<td>95-98</td>
<td>500 ppm TWA; 2000 mg/m3 TWA</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>2.5</td>
<td>5000 ppm TWA (exposures &lt; 10,000 ppm to be cited de minimus); 9000 mg/m3 TWA</td>
</tr>
</tbody>
</table>

Component Related Regulatory Information
This product may be regulated, have exposure limits or other information identified as the following: Rubber solvent (Naphtha).

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
This product is regulated under the Canadian Controlled Products Regulations.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:
The product is a colorless liquid with a gasoline odor. EXTREMELY FLAMMABLE liquid. This product is harmful by inhalation, when in contact with the skin, eyes and if it is swallowed. Keep this product from heat, sparks, or open flame. Contents under pressure, risk of explosion if heated under confinement. Overexposure may cause damage to the liver, lungs, and kidneys.

EYE: This product may cause irritation to the eyes. Vapors may also produce eye irritation. Contact may cause stinging, watering, and redness.

SKIN: This product may cause irritation to the skin. Contact may cause redness, itching, burning, and skin damage. Skin absorption may occur. Prolonged or repeated contact with this product may dry and/or defat the skin. Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.

INGESTION: Ingestion can cause vomiting. If aspirated (liquid enters the lung), the product may be rapidly absorbed through the lungs and can result in chemical pneumonitis. (DO NOT INDUCE VOMITING.)
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INHALATION: This product may be harmful by inhalation. Vapors of this product may cause irritation of the nose, throat, and respiratory tract.

4. FIRST AID

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

SKIN: For skin contact flush with large amounts of water while removing contaminated clothing. Wash contaminated clothing before reuse. If irritation persists, get medical attention. If frostbite or freezing occurs, flush with lukewarm water. Do not use hot water! Get immediate medical attention.

INGESTION: Aspiration hazard: If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Do not induce vomiting. Call a physician immediately.

INHALATION: If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

NOTE TO PHYSICIAN: Provide general supportive measures and treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point: 

Method Used: Not Available

Lower Flammable Limit (LFL): 1.05%  

Auto Ignition: 204°C (399°F)

Flammability Classification: Class 1B

HAZARDOUS COMBUSTION PRODUCTS: Combustion products may include carbon monoxide and unidentified organic compounds.

EXTINGUISHING MEDIA: Dry chemical, foam, carbon dioxide, water fog.

FIRE FIGHTING INSTRUCTIONS: DANGER, EXTREMELY FLAMMABLE! Clear fire area of unprotected personnel and isolate. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back. Empty containers may retain product residue including Flammable or Explosive vapors. Do not cut, drill, grind, or weld near full, partially full, or empty product containers.

Pressurized Container: May explode when exposed to heat or flame.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing.

6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT PROCEDURES: Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Handling equipment must be grounded to prevent sparking. Stop the flow of material, if this is without risk. Dilute the spilled material, where this is possible.

CLEAN-UP PROCEDURES: Eliminate ignition sources including sources of electrical, static or frictional sparks. Ventilate the contaminated area. Absorb spill with inert material. Shovel material into properly labeled closed metal containers for disposal. Place in non-leaking containers for immediate disposal. Flush area with water to remove traces of residue. Do not allow the spilled product to enter public drainage system or open watercourses.
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EVACUATION PROCEDURES: Persons not wearing appropriate protective equipment should be excluded from area of spill until clean up has been completed.

SPECIAL PROCEDURES: Follow all Local, State, Federal and Provincial regulations for disposal. Notify the proper authorities if entry to the environment occurs.

7. HANDLING & STORAGE

HANDLING: Keep liquid and vapor away from heat, sparks and flames. Surfaces that are sufficiently hot may ignite liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition sources distant from the handling site; flash fire can result. Keep containers closed when not in use. Use with adequate ventilation.

Containers, even those that have been emptied, can contain explosive vapors. DO NOT cut, drill, grind, weld or perform similar operations on or near containers. DO NOT pressurize drum containers to empty them.

Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment.

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Air-dry contaminated clothing in a well ventilated area before laundering.

STORAGE: Keep packaged in original, labeled containers until use. Store in a cool, dry, well-ventilated area. Store this product in alight containers away from sources of heat and light. Ground all equipment to prevent accumulation of static charge. Store away from incompatible materials. Do not remove or deface label. Do not reuse container without reconditioning in accordance with any Federal, Provincial, State or local laws. Do not use cutting or welding torches, open flames, or electric arcs on empty or full containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Wear safety glasses. Chemical goggles and/or face shields should be worn, when splashing is a possibility. Contact lenses should not be exposed. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: Use impervious gloves. Use of impervious apron and boots are recommended. Wash contaminated clothing before reuse.

RESPIRATORY PROTECTION: If recommended exposure levels are exceeded, a NIOSH-approved, continuous flow supplied air-respirator, hood or helmet is acceptable.

EXPOSURE GUIDELINE(s):

Component Exposure Limits REMA TIP/TOP USA recommends that its customers minimize employee exposure. REMA therefore suggests that its customers consider adopting the lower of the current OSHA PEL or the ACGIH TLV's for the purpose of evaluating employee exposures. The TLV's recommended by the ACGIH have been updated on a continuing basis.
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**Heptane (n-)** (142-82-5)

ACGIH:       400 ppm TWA  
              500 ppm STEL  

OSHA:        500 ppm TWA; 2000 mg/m³ TWA  
              85 ppm TWA; 350 mg/m³ TWA  

NIOSH:       440 ppm Ceiling (15 min); 1800 mg/m³ Ceiling (15 min)

**Carbon dioxide (124-38-9)**

ACGIH:       5000 ppm TWA  
              30000 ppm STEL  

OSHA:        5000 ppm TWA (exposures < 10,000 ppm to be cited to minimum); 9000 mg/m³ TWA  

NIOSH:       5000 ppm TWA; 9000 mg/m³ TWA  
              30000 ppm STEL; 54000 mg/m³ STEL

### Component Exposure Limits - Canada

The following Provincial Exposure Limits apply for this product's components.

**Heptane (n-)** (142-82-5)

- **Alberta:** 400 ppm TWA; 1640 mg/m³ TWA  
              500 ppm STEL; 2050 mg/m³ STEL  

- **British Columbia:** 400 ppm TWA  

- **Manitoba:** 400 ppm TWA; 1600 mg/m³ TWA  
                500 ppm STEL; 2000 mg/m³ STEL  

- **New Brunswick:** 400 ppm TWA; 1640 mg/m³ TWA  

- **NW Territories:** 400 ppm TWA; 1640 mg/m³ TWA  

- **Nova Scotia:** 400 ppm TWA  

- **Nunavut:** 400 ppm TWA; 1640 mg/m³ TWA  

- **Ontario:** 400 ppm TWAEV; 1635 mg/m³ TWA EV  

- **Quebec:** 400 ppm TWAEV; 1640 mg/m³ TWA EV  

- **Saskatchewan:** 1640 mg/m³ TWA; 400 ppm TWA  

- **Yukon:** 400 ppm TWA; 1600 mg/m³ TWA  

**Carbon dioxide (124-38-9)**

- **Alberta:** 5000 ppm TWA; 9000 mg/m³ TWA  

- **British Columbia:** 30000 ppm STEL; 54000 mg/m³ STEL  

- **Manitoba:** 5000 ppm TWA  

- **New Brunswick:** 5000 ppm TWA; 9000 mg/m³ TWA  

- **NW Territories:** 30000 ppm STEL; 54000 mg/m³ STEL

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Nova Scotia: 15000 ppm STEL; 27000 mg/m3 STEL
3000 ppm TWA
30000 ppm STEL

Nunavut: 5000 ppm TWA; 9000 mg/m3 TWA
15000 ppm STEL; 27000 mg/m3 STEL

Ontario: 5000 ppm TWA; 9000 mg/m3 TWA
15000 ppm STEL; 27000 mg/m3 STEL

Quebec: 5000 ppm TWA; 9000 mg/m3 TWA
15000 ppm STEL; 27000 mg/m3 STEL

Saskatchewan: 9000 mg/m3 TWA; 5000 ppm TWA
54000 mg/m3 STEL; 30000 ppm STEL

Yukon: 5000 ppm TWA; 9000 mg/m3 TWA
15000 ppm STEL; 27000 mg/m3 STEL

9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE: clear, colorless

ODOR: gasoline odor

ODOR THRESHOLD: Not Available

BOILING POINT: 98°C (208°F)

SOLUBILITY IN WATER: Insoluble

SPECIFIC GRAVITY: 0.6837 (water=1)

VAPOR PRESSURE: 40 mm Hg @ 20°C (68°F)

% VOLATILE: 100%

10. STABILITY & REACTIVITY

INCOMPATIBILITY WITH OTHER MATERIALS: This product may react with strong oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

DECOMPOSITION PRODUCTS: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Through inhalation, ingestion or passage of the material through the skin the following symptoms may occur: stoma:th or intestinal upset (nausea, vomiting, diarrhea); irritation (nose, throat, airway); central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness); temporary changes in mood and behavior; loss of appetite; loss of coordination; irregular heartbeat; narcosis (dazed or sluggish feeling).
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CHRONIC TOXICITY
Prolonged or repeated liquid contact can result in defatting and drying of the skin, which may result in skin irritation and dermatitis.

CARCINOGENICITY
No carcinogenicity data available for this product.

Component Carcinogenicity
None of this product’s components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

12. ECOLOGICAL INFORMATION
n-Heptane is dangerous to aquatic life in high concentrations (CHRIS, 1992).

Component Analysis - Ecotoxicity - Aquatic Toxicity
Heptane (n-) (142-82-5)

Test & Species
24 Hr LC50 goldfish  4.0 mg/L
24 Hr LC50 mosquito fish  4900 mg/L
96 Hr LC50 cichlid fish  375.0 mg/L

13. DISPOSAL CONSIDERATIONS
DISPOSAL: Waste must be handled in accordance with all federal, state, provincial, and local regulations.

UNUSED & UNCONTAMINATED PRODUCT:
Component Waste Numbers
No EPA Waste Numbers are applicable for this product’s components.

D001 (ignitable)
This is a characteristic waste ID.

14. TRANSPORT INFORMATION

US DOT Information
Shipping Names: Aerosols (Contains: Heptane (n-))
UN/NA #: UN1050 Hazard Class: 2.1
Required Label(s): Flammable Gas
Additional Info.: PLACARD (WHEN REQUIRED): FLAMMABLE GAS, 2.1

EXCEPTIONS: DOT Paragraphs 173.306
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TDG Information
Shipping Name: Aerosols (Contains: Heptane (n-))
UN/NA #: UN1950 Hazard Class: 2.1
Required Label(s): Flammable Gas

IMDG Information
Additional Info.: F-D, S-U

IATA Information
Additional Info.: 2.1

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS
SARA 313 INFORMATION:
Component Analysis
None of this products components are listed under SARA Section 313 (40 CFR 372.65).

SARA HAZARD CATEGORY:
Acute Health: Yes Chronic Health: No Fire: Yes Pressure: No Reactive: No

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA):
Component Analysis
None of this products components are listed under CERCLA (40 CFR 302.4).

TOXIC SUBSTANCES CONTROL ACT (TSCA): All components are on the U.S. EPA TSCA Inventory List.

Component Analysis – Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane (n-)</td>
<td>142-82-5</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
</tbody>
</table>

STATE RIGHT-TO-KNOW:
Component Analysis - State
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane (n-)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

CANADIAN REGULATIONS

WHMIS INFORMATION:
WHMIS Classification: B2, D2B

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Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane (n-)</td>
<td>142-82-5</td>
<td>1 %</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>1 %</td>
</tr>
</tbody>
</table>

EUROPE:

Component Analysis

<table>
<thead>
<tr>
<th>Component (CAS#)</th>
<th>EC #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heptane (n-) (142-82-5)</td>
<td>205-563-8</td>
</tr>
<tr>
<td>Carbon dioxide (124-38-9)</td>
<td>204-698-9</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

NFPA Ratings: Health: 1 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

MEDICAL EMERGENCIES:

Call CHEMTREC 24 hours a Day for emergency information 800-424-9300

FOR ANY OTHER INFORMATION:

REMA TIP-TOP/NO. AMERICA
119 Rockland Ave.
NORTHVALE, NJ 07647
201-968-8100

NOTICE: REMA TIP-TOP USA believes that the information contained on this material safety data sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily all-inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with nor followed in violation of applicable laws, regulations, rules or insurance requirements.

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