1. CHEMICAL PRODUCT/DISTRIBUTOR IDENTIFICATION

Name: MS-260 Safezone Cleaner for Plastic, Glass & Metal

Product Use: Aerosol cleaner for Plastic, Glass & Metal

MANUFACTURER/DISTRIBUTOR: Emergency Phone Number:

Miller-Stephenson Chemical (800) 424-9300
George Washington Highway
Danbury, Conn. 06810 USA
(203) 743-4447

Date Revised: July 2009

2. INGREDIENTS

<table>
<thead>
<tr>
<th>Material (s)</th>
<th>CAS #/EINECS#</th>
<th>Approximate %</th>
<th>EU Classification (67/548/EEC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5/200-578-6</td>
<td>10 – 20</td>
<td>F R11</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2/203-905-0</td>
<td>1 – 5</td>
<td>Xn R20/21/22, R36/38</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6/200-827-9</td>
<td>1 – 5</td>
<td>F+ R12</td>
</tr>
<tr>
<td>n-Butane</td>
<td>106-97-8/203-448-7</td>
<td>1 – 5</td>
<td>F+ R12</td>
</tr>
<tr>
<td>Non-hazardous and other components below reportable levels</td>
<td>80 – 90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See Section 16 for further information on EU Classification

3. HAZARDS IDENTIFICATION

Clear to hazy liquid with a perfume odor packaged in an aerosol container.

Skin: This product maybe harmful if it is absorbed through the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation: Intentional misuse by concentrating and inhaling the product can by harmful or fatal.

Ingestion: Exposure by ingestion of an aerosol unlikely. Components of the product may be absorbed into the body.


4. **FIRST AID MEASURES**

   **Eye:** Immediately rinse with water for at least 15 mins. holding the eyelids open to be sure the material is washed out. Get medical attention if irritation persists.

   **Skin:** Immediately take off contaminated clothing. Wash exposed area with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use.

   **Inhalation:** Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention if symptoms persist.

   **Ingestion:** Is unlikely route of exposure for an aerosol product. If ingestion occurs, rinse mouth with a small amount of water. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to an unconscious or drowsy person.

5. **FIRE FIGHTING MEASURES**

   **Extinquishing Media:** Use water spray, foam, carbon dioxide, or dry chemical.

   **Special Fire Fighting Procedures:** Cool fire exposed containers with water. Protect against bursting cans.

   **Unusual Fire Hazards:** Contents under pressure. Keep away from heat and open flames. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120°F/49°C may cause cans to burst. Vapor or gas may spread to distant ignition sources and flash back.

6. **ACCIDENTAL RELEASE MEASURES**

   **Spill:** Wear appropriate personal protective equipment. Eliminate all sources of ignition. Ventilate area. Use non-combustible material like vermiculite, sand, or earth to soak up material and collect into a suitable container for disposal. Prevent entry into waterways, sewers, basements or other confined areas. Report spills and releases as required to appropriate authorities.

7. **HANDLING AND STORAGE**

   **Handling:** Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Avoid breathing vapors and mists. Use with adequate ventilation. Wash exposed skin thoroughly with soap and water after use. Keep away from heat, sparks and flame. Contents under pressure. Do not puncture or incinerate container.

   **Storage:** Store in a cool, well-ventilated area at temperatures below 120°F/49°C. Do not store in direct sunlight.
8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>1000 ppm ACGIH TLV-TWA</td>
</tr>
<tr>
<td></td>
<td>500 ppm skin TWA DFG MAK</td>
</tr>
<tr>
<td></td>
<td>1000 ppm skin TWA UK EH40-OES</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>20 ppm ACGIH TLV-TWA</td>
</tr>
<tr>
<td></td>
<td>20 ppm skin TWA DFG MAK</td>
</tr>
<tr>
<td></td>
<td>25 ppm skin TWA UK EH40-OES</td>
</tr>
<tr>
<td>Propane</td>
<td>1000 ppm ACGIH TLV-TWA</td>
</tr>
<tr>
<td></td>
<td>1000ppm TWA DFG MAK</td>
</tr>
<tr>
<td></td>
<td>Asphyxiant UK EH40-OES</td>
</tr>
<tr>
<td>n-Butane</td>
<td>1000 ppm ACGIH TLV-TWA</td>
</tr>
<tr>
<td></td>
<td>1000 ppm TWA DFG MAK</td>
</tr>
<tr>
<td></td>
<td>600 ppm TWA UK EH40-OES</td>
</tr>
<tr>
<td></td>
<td>750 ppm STEL UK EH40-OES</td>
</tr>
</tbody>
</table>

**Ventilation:** General ventilation should be adequate for normal use. For operations where the occupational exposure limit may be exceeded, mechanical ventilation such as local exhaust may be needed to maintain exposure levels below applicable limits.

**Respiratory Protection:** None needed under normal use conditions. For operations where the occupational exposure limit may be exceeded, a local authority approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**Skin Protection:** Impervious gloves are recommended for operations which may result in prolonged/ repeated skin contact.

**Eye Protection:** Wear chemical safety glasses or goggles to prevent eye contact.

**Other Protective Equipment:** Protective clothing if needed to avoid prolonged/ repeated skin contact. Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.
9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** White foam that dissipates to a liquid, with a floral odor packaged in an aerosol container.

**Boiling Point:** N.A.

**pH Information:** 9.3

**Vapor Density (Air=1):** Not Determined

**Specific Gravity:** < 1.0

**Flash point:** Less than –17°C (0°F) (propellant)  
Greater than 38°C (100°F) (concentrate)

**Aerosol Flame Extension:** None

**Aerosol Fire Protection Level:** 1 Aerosol (NFPA 30B)

**Percent Volatile by Volume:** 100%

**Pressure:** 66 – 76 psig at 70°F/20°C

**Solubility in H₂O:** Completely

**Evaporation Rate (Ether=1):** <1.0

**Flammable Limits:**

**LEL:** 1.1% (2-butoxyethanol)

**UEL:** 19% (ethanol)

**Flashback:** None

10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable at normal conditions.

**Conditions to Avoid:** Keep away from heat, sparks, flames and other sources of ignition.

**Hazardous Decomposition Products:** None known.

**Hazardous Polymerization:** Will not occur.

11. TOXICOLOGICAL INFORMATION

**Potential Health Effects:**

**Eye:** May cause mild irritation.

**Skin:** Prolonged or repeated contact may cause mild irritation and defatting of the skin.

**Inhalation:** Breathing vapors or mists may cause irritation of the mucous membranes and upper respiratory tract. Excessive overexposure may cause headache, dizziness, drowsiness and depressed respiration and heart rate, heart rhythm irregularities, shortness of breath, unconsciousness or death.

**Ingestion:** Ingestion is a unlikely route of exposure for an aerosol product. May cause gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhea. Large amounts swallowed may cause central nervous system depression, noncardiogenic, pulmonary edema, metabolic acidosis, kidney and liver injury and coma.
**Chronic Hazards:** Prolonged overexposure to ethanol may cause liver damage. Prolonged overexposure to 2-Butoxyethanol may cause blood, liver, and kidney damage. 2-butoxyethanol has been shown to cause birth defects in laboratory animals.

**Carcinogenic Status:** None of the components of this product are listed as carcinogens by IARC or the EU Directive.

**Medical Conditions Aggravated by Exposure:** Persons with pre-existing skin, respiratory and cardiovascular disorders.

**Acute Toxicity Values:**

Acute LD50: 5684 mg/kg estimated, Rat, Dermal

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12. **ECOLOGICAL INFORMATION**

Components of this product have been identified as having potential environmental concerns.

96 hour LC50 in Fish: 28957mg/L estimated  
48 hour EC50 in Daphnia: 43419 mg/L estimated  
72 hour IC50 in Algae: 12207 mg/L estimated

13. **DISPOSAL CONSIDERATIONS**

Content under pressure. Do not puncture, incinerate, or crush containers. Do not allow this material to drain into sewer/water supplies. When contents are depleted continue to depress button until all gas is expelled. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all local, regional, and national regulations.

14. **TRANSPORT INFORMATION**

**DOT Proper Shipping Name:** Consumer Commodity  
**DOT Technical Name:** None  
**DOT Hazard Class:** ORM-D  
**UN Number:** None  
**DOT Labels Required (49CFR 172.101):** None  
**Hazardous Substance (49CFR172.101):** None  
**Reportable Quantity:** N/A

**IMDG Shipping Description:** Aerosol, 2, UN1950, FP – 17 C, Limited Quantity  
**ID Number:** UN1950  
**Hazard Class:** 2  
**Packing Group:** None  
**Labels Required:** None  
**Marking Required:** Aerosol Marking on Carton  
**Placard Required:** Limited Quantities On Transport Containers
IATA Shipping Description: UN1950, Aerosols, 2.2
UN Number: UN1950
Hazard Class: 2.2
Packing Group: None
Labels Required: 2.2
Marking Required: UN1950 Aerosols

ADR Shipping Description: UN1950, Aerosols, 2.2
UN Number: UN1950
Hazard Class: 2
Classification Code: 5A
Packing Group: None
Labels Required: 2.2
Marking Required: UN1950 Aerosols

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS:

European Community Labeling:
Keep out of reach of children.
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 122°F/50°C.
Do not pierce or burn even after use.
21% by mass of the contents are flammable.
Safety Data Sheet available for professional user on request.

European Inventory of Commercial Chemical Substances: All of the components of this product are listed on EINECS inventory.

16. OTHER INFORMATION

EU Classes and Risk Phrases for Reference (See Section 2 and 3):
Xn Harmful
F+ Extremely Flammable
F Highly Flammable
R12 Extremely Flammable
R11 Highly Flammable
R20/21/22 Harmful by inhalation, in contact skin and if swallowed
R36/38 Irritating to eyes and skin