MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number: CO1000
Product name: Stainless Steel Cleaner & Polish - Water Base
Effective date: 11-Jan-2013
Company information: Brady Industries
Company phone: General Assistance 702-876-3990
Emergency telephone US: 1-866-836-8855
Emergency telephone outside US: 1-952-852-4646
Version #: 14
Supersedes date: 24-Jan-2011

2. Hazards Identification

Emergency overview: Aerosol. CONTENTS UNDER PRESSURE.

Potential health effects:

Routes of exposure:
- Skin contact
- Ingestion

Eyes:
- Contact with eyes may cause irritation.

Skin:
- Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

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

Ingestion:
- Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage.
- Components of the product may be absorbed into the body by ingestion.

Target organs:
- Central nervous system.

Chronic effects:
- May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage.

Signs and symptoms:
- Narcosis. Defatting of the skin. Skin irritation.

3. Composition / Information on Ingredients

Components | CAS # | Percent
--- | --- | ---
Synthetic Isoparaffinic Hydrocarbon | 64742-47-8 | 20 - 30
n-Butane | 106-97-8 | 8 - 10
Propane | 74-98-6 | 3 - 5
Non-hazardous and other components below reportable levels | | 40 - 60

4. First Aid Measures

First aid procedures:

Eye contact:
- Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact:
- Wash off with warm water and soap. Get medical attention if irritation develops and persists.

Inhalation:
- If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

Ingestion:
- If material is ingested, immediately contact a poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.

Notes to physician:
- Symptoms may be delayed.
5. Fire Fighting Measures

Flammable properties
Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media
Suitable extinguishing media
Foam. Dry chemical. Carbon dioxide (CO2). Do not use water jet.

Protection of firefighters
Protective equipment and precautions for firefighters
In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up. Move containers from fire area if you can do so without risk.

6. Accidental Release Measures

Methods for containment
Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk.

Methods for cleaning up
Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling
Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Avoid prolonged exposure.

Storage
Contents under pressure. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs. Level 1 Aerosol (NFPA 30B)

8. Exposure Controls / Personal Protection

Exposure limits
ACGIH

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>TWA</th>
<th>STEL</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Butane</td>
<td>106-97-8</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1000 ppm</td>
<td>Not established</td>
<td>Not established</td>
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OSHA

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<td>1000 ppm</td>
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</tr>
</tbody>
</table>

Personal protective equipment

Eye / face protection
Not normally needed.

Skin protection
Chemical resistant gloves.

Respiratory protection
If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance
Compressed liquefied gas.

Boiling point
266 °F (130 °C) estimated

Color
White.

Density
0.8303 g/cm3 estimated

Flammability (HOC)
17.9319 kJ/g estimated

Flash back
No

Flash point
-156 °F (-104.4 °C) Propellant

Form
Aerosol.
Freezing point: Not available
Odor: Characteristic.
PpH: 5.8 - 6.8
Physical state: Liquid.
Pressure: 25 - 45 psig @ 70F
Solubility: Negligible
Specific gravity: 0.8304

10. Chemical Stability & Reactivity Information
Chemical stability: Stable at normal conditions.
Conditions to avoid: Heat, flames and sparks.
Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological Information
Acute effects: Acute LD50: 6798 mg/kg estimated, Rat, Dermal
Component analysis - LD50

<table>
<thead>
<tr>
<th>Compound</th>
<th>Component ID</th>
<th>LC50</th>
<th>Hazard</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
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<td>n-Butane</td>
<td>106-97-8</td>
<td>658 mg/L 4 h</td>
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</tr>
<tr>
<td>Synthetic Isoparaffinic Hydrocarbon</td>
<td>64742-47-8</td>
<td>&gt;5000 mg/kg</td>
<td>Oral LD50 Rat &gt;5000 mg/kg; Dermal LD50 Rabbit &gt;2000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Sensitization: Not expected to be hazardous by OSHA criteria.
Teratogenicity: Not expected to be hazardous by OSHA criteria.

12. Ecological Information
Ecotoxicity: Components of this product have been identified as having potential environmental concerns.
LC50  161 mg/L, Fish, 96.00 Hours,

13. Disposal Considerations
Disposal instructions: Contents under pressure. Do not puncture, incinerate or crush. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

14. Transport Information
Department of Transportation (DOT) Requirements

Basic shipping requirements: Aerosols
Proper shipping name: 2.1
UN number: UN1950
Additional information:
Special provisions: 153, N82
Packaging exceptions: LTD QTY
Packaging non bulk: None
Packaging bulk: None

Further information: This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2013, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/13 and may be used now in place of the "Consumer Commodity ORM-D" marking but not concurrently.
### IMDG

**Basic shipping requirements:**
- Proper shipping name: AEROSOLS
- Hazard class: 2.1
- UN number: 1950

**Additional information:**
- Packaging exceptions: LTD QTY
- Item: 5F
- Labels required: None
- Transport Category: 2

### IATA

**Basic shipping requirements:**
- Proper shipping name: Aerosols, flammable
- Hazard class: 2.1
- UN number: 1950

**Additional information:**
- Packaging exceptions: LTD QTY
- Labels required: None

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**15. Regulatory Information**

**US federal regulations**
- OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- CERCLA/SARA Hazardous Substances - Not applicable.

**Occupational Safety and Health Administration (OSHA)**
- 29 CFR 1910.1200 hazardous chemical: Yes

**CERCLA (Superfund) reportable quantity**
- None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**
- Section 302 extremely hazardous substance: No
- Section 311 hazardous chemical:
  - Immediate Hazard - Yes
  - Delayed Hazard - No
  - Fire Hazard - Yes
  - Pressure Hazard - Yes
  - Reactivity Hazard - No

**Inventory status**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of New and Existing Chemicals (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

**State regulations**

**U.S. - Pennsylvania - RTK (Right to Know) List**
- n-Butane: 106-97-8 Present
- Propane: 74-98-6 Present
- Synthetic Isoparaffinic Hydrocarbon: 64742-47-8 Present

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Product name: Stainless Steel Cleaner & Polish - Water Base
Product #: 844-006 Revision date: 11-JAN-2013 Print date: 11-JAN-2013
### 16. Other Information

**Further information**

HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings**

- **Health**: 1
- **Flammability**: 2
- **Physical hazard**: 0

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and experience currently available.

**MSDS sections updated**

This document has undergone significant changes and should be reviewed in its entirety.

**Prepared by**

Regulatory Compliance