SAFETY DATA SHEET

1. Identification
Product number: CL844
Product identifier: STAINLESS STEEL MAINTAINER
Revision date: 09-02-2014
Company information:
CLAIRE MANUFACTURING
1005 S. WESTGATE DR.
ADDISON, IL 60101 United States

Company phone
Emergency telephone US: 1-866-836-8855
Emergency telephone outside US: 1-952-852-4646
Version #: 04
Supersedes date: 08-13-2014
Recommended use: Cleaner
Recommended restrictions: None known.

2. Hazard(s) identification
Physical hazards: Flammable aerosols Category 1
Health hazards: Aspiration hazard Category 1
Environmental hazards: Hazardous to the aquatic environment, acute hazard Category 3
Hazardous to the aquatic environment, long-term hazard Category 3
OSHA defined hazards: Not classified.

3. Composition/information on ingredients
Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td></td>
<td>106-97-8</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Distillates (Petroleum),</td>
<td></td>
<td>64742-47-8</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Hydrotreated Light</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4. First-aid measures

**Inhalation**

Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

**Eye contact**

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

**Ingestion**

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn’t get into the lungs.

**Most important symptoms/effects, acute and delayed**

Direct contact with eyes may cause temporary irritation. Aspiration may cause pulmonary edema and pneumonitis.

**Indication of immediate medical attention and special treatment needed**

Treat symptomatically.

**General information**

Take off all contaminated clothing immediately. Wash contaminated clothing before reuse. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

**Suitable extinguishing media**

Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

**General fire hazards**

Extremely flammable aerosol.

### 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Methods and materials for containment and cleaning up**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

**Precautions for safe handling**

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Use only outdoors or in a well-ventilated area. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Provide adequate ventilation. Avoid breathing mist or vapor.

**Conditions for safe storage, including any incompatibilities**

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Keep in a cool place. Store away from incompatible materials (see Section 10 of the SDS). Level 1 Aerosol.
8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>PEL</td>
<td>1800 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>TWA</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>800 ppm</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>TWA</td>
<td>1800 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection       Wear safety glasses with side shields (or goggles).
Hand protection           Wear protective gloves.
Skin protection
Other                     Wear suitable protective clothing.
Respiratory protection    If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards           Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state          Liquid.
Form                   Aerosol.
Color                  Not available.
Odor                   Not available.
Odor threshold         Not available.

pH                     5.6 - 6.6 estimated

Melting point/freezing point
Not available.

Initial boiling point and boiling range
229.79 °F (109.88 °C) estimated

Flash point
-156.0 °F (-104.4 °C) Propellant estimated

Evaporation rate        Not available.
Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Not available.
Explosive limit - lower (%)
Not available.
Explosive limit - upper (%)
Not available.
Vapor pressure 47 - 67 psig @ 70F estimated
Vapor density Not available.
Relative density Not available.
Solubility(ies)
  Solubility (water) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature 392 °F (200 °C) estimated
Decomposition temperature Not available.
Viscosity Not available.
Other information
  Flammability class Flammable IB estimated
  Heat of combustion 6.97 kJ/g estimated
  Heat of combustion (NFPA 30B) 10.64 kJ/g estimated
  Percent volatile 77.24 % estimated
  Specific gravity 0.948 estimated
  VOC (Weight %) 15.15 % estimated

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.
Conditions to avoid Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
  Ingestion Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung edema or pneumonia.
  Inhalation Not available.
  Skin contact No adverse effects due to skin contact are expected.
  Eye contact Direct contact with eyes may cause temporary irritation.
Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.
Information on toxicological effects
Acute toxicity Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>WATERBASE STAINLESS STEEL CLNR 844 (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>30739.2988 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>6277.4639 mg/kg, 24 Hours estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6796 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC100</td>
<td>Cat</td>
<td>610.998 % estimated</td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>8397.8271 mg/l, 120 Minutes estimated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>353.0211 %, 120 Minutes estimated</td>
</tr>
<tr>
<td>Product</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>Oral LD50</td>
<td>Rat 1355 mg/l</td>
</tr>
<tr>
<td>Mouse</td>
<td>Mouse LD50</td>
<td>1237 mg/l, 120 Minutes 52 %, 120 Minutes</td>
</tr>
<tr>
<td>Rabbit</td>
<td>Inhalation LD50</td>
<td>&gt; 2000 mg/kg, 24 Hours</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>Acute LD50</td>
<td>Rat 1355 mg/l</td>
</tr>
<tr>
<td>Mouse</td>
<td>Mouse LD50</td>
<td>1237 mg/l, 120 Minutes 52 %, 120 Minutes</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation: Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensitization:
- Respiratory sensitization: Not a respiratory sensitizer.
- Skin sensitization: Not available.
- Germ cell mutagenicity: Not available.
Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure: Not classified.
Specific target organ toxicity - repeated exposure: Not classified.
Aspiration hazard: May be fatal if swallowed and enters airways.

12. Ecological information
Ecotoxicity: Harmful to aquatic life with long lasting effects.
Product Test Results

<table>
<thead>
<tr>
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<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WATERBASE STAINLESS STEEL CLNR 844 (CAS Mixture)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>IC50 Algae 23513 mg/L, 72 Hours</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 Daphnia 6441 mg/L, 48 Hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 Fish 160 mg/L, 96 Hours</td>
</tr>
<tr>
<td><strong>Components</strong></td>
<td></td>
</tr>
<tr>
<td>Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8)</td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours</td>
</tr>
<tr>
<td>Polymethylsilsiloxane (CAS 63148-62-9)</td>
<td></td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 Channel catfish (Ictalurus punctatus) 2.36 - 4.15 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
No data is available on the degradability of this product.

**Bioaccumulative potential**
No data available.

**Partition coefficient n-octanol / water (log Kow)**
- Butane 2.89
- Propane 2.36

**Mobility in soil**
No data available.

**Other adverse effects**
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Local disposal regulations**
Dispose in accordance with all applicable regulations.

**Hazardous waste code**
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

**DOT**
- **UN number**: UN1950
- **UN proper shipping name**: Aerosols
- **Transport hazard class(es)**
  - **Class**: 2.1
  - **Subsidiary risk**: -
  - **Label(s)**: 2.1
- **Packing group**: Not applicable.
- **Special precautions for user**
  - Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
- **Special provisions**: 153, N82
- **Packaging exceptions**: LTD QTY
- **Packaging non bulk**: None
- **Packaging bulk**: None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, 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 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

**IATA**
- **UN number**: UN1950
- **UN proper shipping name**: Aerosols, flammable
Transport hazard class(es)

Class 2.1
Subsidiary risk -
Label(s) 2.1

Packing group Not applicable.
Environmental hazards No.
ERG Code 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed.
Cargo aircraft only Allowed.
Packaging Exceptions LTD QTY

IMDG

UN number UN1950
UN proper shipping name AEROSOLS

Transport hazard class(es)

Class 2.1
Subsidiary risk -
Label(s) None

Packing group Not applicable.

Environmental hazards

Marine pollutant No.
EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions LTD QTY Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

DOT

IATA; IMDG

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.
SARA 304 Emergency release notification
Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.
SARA 311/312 Hazardous chemical
No
SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)
Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
US. Massachusetts RTK - Substance List
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)
US. New Jersey Worker and Community Right-to-Know Act
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)
US. Pennsylvania Worker and Community Right-to-Know Law
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)
US. Rhode Island RTK
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)
US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories
<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<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 Existing Commercial Chemical Substances (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>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Product name: WATERBASE STAINLESS STEEL CLNR 844
Product #: 1239    Version #: 04    Revision date: 09-02-2014    Issue date: 08-11-2014
Country(s) or region          Inventory name            On inventory (yes/no)*
United States & Puerto Rico  Toxic Substances Control Act (TSCA) Inventory  Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date                        08-11-2014
Revision date                     09-02-2014
Version #                         04

Disclaimer
The information in the sheet was written based on the best knowledge and experience currently available. 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.

Revision Information
Physical & Chemical Properties: Multiple Properties

Product name: WATERBASE STAINLESS STEEL CLNR 844
Product #: 1239  Version #: 04  Revision date: 09-02-2014  Issue date: 08-11-2014