SAFETY DATA SHEET

1. Identification

Product identifier: Heat Stable Silicone Release Agent

Other means of identification
SDS number: RE1000007790

Recommended restrictions
Product use: Lubricant
Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer
Company Name: CLAIRE MANUFACTURING COMPANY
Address: 1000 Integram Dr
Pacific, MO 63069
Telephone: 1-630-543-7600
Fax:
Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Physical Hazards
Flammable aerosol Category 1

Health Hazards
Aspiration Hazard Category 1

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement: Extremely flammable aerosol. May be fatal if swallowed and enters airways.

Precautionary Statements
Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor Do NOT induce vomiting.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>50 - &lt;100%</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>20 - &lt;50%</td>
</tr>
<tr>
<td>Naphtha (petroleum), heavy alkylate</td>
<td>64741-65-7</td>
<td>10 - &lt;20%</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me</td>
<td>63148-62-9</td>
<td>1 - &lt;5%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Rinse mouth. Call a physician or poison control center immediately. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. Get medical attention if symptoms occur.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures
General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

Conditions for safe storage, including any incompatibilities: Store locked up. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Aerosol Level 3

8. Exposure controls/personal protection

Control Parameters
### Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>REL</td>
<td>800 ppm 1,900 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>1,000 ppm</td>
<td>US. ACGIH Threshold Limit Values (03 2018)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>800 ppm 1,900 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td>Propane</td>
<td>REL</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2005)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td>Naphtha (petroleum), heavy alkylate</td>
<td>PEL</td>
<td>100 ppm 400 mg/m³</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>100 ppm 400 mg/m³</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>REL</td>
<td>100 ppm 400 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2010)</td>
</tr>
</tbody>
</table>

#### Appropriate Engineering Controls

No data available.

#### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.

**Eye/face protection:** Wear safety glasses with side shields (or goggles).

**Skin Protection**

**Hand Protection:** No data available.

**Other:** Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

**Hygiene measures:** Observe good industrial hygiene practices. When using do not smoke.

### 9. Physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form:</td>
<td>Spray Aerosol</td>
</tr>
<tr>
<td>Color:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Odor:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>Estimated -104.4 °C</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

- Flammability limit - upper (%): Estimated 7 % (V)
- Flammability limit - lower (%): Estimated 1 % (V)
- Explosive limit - upper (%): No data available.
- Explosive limit - lower (%): No data available.

Vapor pressure: No data available.

Vapor density: No data available.
Density: No data available.
Relative density: No data available.
Solubility(ies)
- Solubility in water: No data available.
- Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: No data available.

Hazardous Decomposition Products: No data available.

11. Toxicological information

Information on likely routes of exposure
- Inhalation: No data available.
- Skin Contact: No data available.
- Eye contact: No data available.
- Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- Inhalation: No data available.
- Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

**Oral**
- **Product:** Not classified for acute toxicity based on available data.
- **Specified substance(s):**
  - Naphtha (petroleum), heavy alkylate
  - LD 50: > 2,000 mg/kg

**Dermal**
- **Product:** Not classified for acute toxicity based on available data.
- **Specified substance(s):**
  - Naphtha (petroleum), heavy alkylate
  - LD 50: > 2,000 mg/kg

**Inhalation**
- **Product:**
  - **Specified substance(s):**
    - Butane
    - LC 50: > 100 mg/l
    - LC 50: > 100 mg/l
  - Propane
    - LC 50: > 100 mg/l
    - LC 50: > 100 mg/l
  - Naphtha (petroleum), heavy alkylate
    - LD 50: > 5 mg/l

**Repeated dose toxicity**
- **Product:** No data available.
- **Specified substance(s):**
  - **Butane**
    - LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study
    - NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
  - **Propane**
    - NOAEL (Rat(Female, Male), Inhalation, >= 28 d): 4,000 ppm(m) Inhalation Experimental result, Key study
    - LOAEL (Rat(Female, Male), Inhalation, >= 28 d): 12,000 ppm(m) Inhalation Experimental result, Key study

**Skin Corrosion/Irritation**
- **Product:** No data available.

**Serious Eye Damage/Eye Irritation**
- **Product:** No data available.
Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Specified substance(s):
Naphtha (petroleum), heavy alkylate
May be fatal if swallowed and enters airways.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
- Butane: LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
- Propane: LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
- Siloxanes and Silicones, di-Me: LC 50 (Redear sunfish (Lepomis microlophus), 96 h): 26.27 - 56.73 mg/l Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
- Butane: LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
- Siloxanes and Silicones, di-Me: LC 50 (Water flea (Daphnia magna), 48 h): 44.5 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

Specified substance(s):
- Butane: 100 % (385.5 h) Detected in water. Experimental result, Key study
- Propane: 100 % (385.5 h) Detected in water. Experimental result, Key study
  50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in soil:
Product: No data available.

Known or predicted distribution to environmental compartments
- Butane: No data available.
- Propane: No data available.
Naphtha (petroleum), heavy alkylate
Siloxanes and Silicones, di-Me

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT
UN Number: UN 1950
UN Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es):
Class: 2.1
Label(s): –
Packing Group: II
Marine Pollutant: No
Environmental Hazards: No
Marine Pollutant: No
Special precautions for user: Not regulated.

IMDG
UN Number: UN 1950
UN Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es):
Class: 2
Label(s): –
EmS No.: –
Packing Group: –
Environmental Hazards: No
Marine Pollutant: No
Special precautions for user: Not regulated.

IATA
UN Number: UN 1950
Proper Shipping Name: Aerosols, flammable
Transport Hazard Class(es):
Class: 2.1
Label(s): –
Packing Group: –
Environmental Hazards: No
Marine Pollutant: No
Special precautions for user: Not regulated.
15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Propane</td>
<td>lbs. 100</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Fire Hazard
- Immediate (Acute) Health Hazards
- Flammable aerosol
- Aspiration Hazard

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Propane</td>
<td>lbs. 100</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Propane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Naphtha (petroleum), heavy alkylate</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Siloxanes and Silicones, di-Me</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

US State Regulations

US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

<table>
<thead>
<tr>
<th>Chemical Identity</th>
</tr>
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<tbody>
<tr>
<td>Butane</td>
</tr>
<tr>
<td>Propane</td>
</tr>
<tr>
<td>Naphtha (petroleum), heavy alkylate</td>
</tr>
</tbody>
</table>

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.
US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Butane
Propane
Naphtha (petroleum), heavy alkylate

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable
### Inventory Status:

- **Australia AICS:** On or in compliance with the inventory
- **Canada DSL Inventory List:** On or in compliance with the inventory
- **EINECS, ELINCS or NLP:** Not in compliance with the inventory.
- **Japan (ENCS) List:** Not in compliance with the inventory.
- **China Inv. Existing Chemical Substances:** On or in compliance with the inventory
- **Korea Existing Chemicals Inv. (KECI):** On or in compliance with the inventory
- **Canada NDSL Inventory:** Not in compliance with the inventory.
- **Philippines PICCS:** On or in compliance with the inventory
- **US TSCA Inventory:** On or in compliance with the inventory
- **New Zealand Inventory of Chemicals:** On or in compliance with the inventory
- **Japan ISHL Listing:** Not in compliance with the inventory.
- **Japan Pharmacopoeia Listing:** Not in compliance with the inventory.
- **Mexico INSQ:** On or in compliance with the inventory
- **Ontario Inventory:** On or in compliance with the inventory
- **Taiwan Chemical Substance Inventory:** On or in compliance with the inventory

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

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>12/18/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision Information:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Version #:</td>
<td>1.0</td>
</tr>
<tr>
<td>Further Information:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Disclaimer:</td>
<td>This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.</td>
</tr>
</tbody>
</table>