SAFETY DATA SHEET

1. Identification

Product identifier: AUTUMN LEAVES AIR FRESHENER & DEODORIZER

Other means of identification
SDS number: RE1000012091

Recommended restrictions
Product use: Air Freshener
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

Label Elements

Hazard Symbol:

Signal Word: Danger
Hazard Statement: Extremely flammable aerosol.
Precautionary Statements
Prevention: 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.
Storage: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
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>Propane</td>
<td>74-98-6</td>
<td>5 - &lt;10%</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>5 - &lt;10%</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</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 thoroughly.

Inhalation: Move to fresh air.

Skin Contact: Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

Eye contact: Rinse immediately with plenty of water.

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: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

Notification Procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe 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: Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

8. Exposure controls/personal protection

Control Parameters

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<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 PEL</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,800 mg/m³</td>
<td>US. Tennessee, OELs. Occupational Exposure Limits, Table Z1A (06 2008)</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>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>TWA</td>
<td>800 ppm 1,900 mg/m³</td>
<td>US. Tennessee, OELs. Occupational Exposure Limits, Table Z1A (06 2008)</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></td>
<td>AN ESL</td>
<td>3,000 ppb</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>7,100 µg/m³</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)</td>
</tr>
<tr>
<td>Substance</td>
<td>TWA PEL</td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1,000 ppm</td>
<td>1,000 ppm</td>
<td>1,000 ppm</td>
</tr>
<tr>
<td>Phenol, 2,6-bis(1,1-dimethylthyl)-4-methyl-phenol</td>
<td>10 mg/m³</td>
<td>10 mg/m³</td>
<td>2 mg/m³</td>
</tr>
<tr>
<td>2-Propanol, 2-methyl-phenol</td>
<td>100 ppm</td>
<td>300 mg/m³</td>
<td>150 ppm</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>92 µg/m³</td>
<td>180 µg/m³</td>
<td>35 ppm</td>
</tr>
</tbody>
</table>

**Notes**

- **TWA PEL** refers to the Threshold Limit Value as a time-weighted average concentration permitting exposure during an 8-hour workday, 40-hour workweek.
- **STEL** (short-term exposure limit) is the concentration that should not be exceeded during any 15-minute period.
- **REL** (recommended exposure limit) provides a guideline for the concentration recommended to be occasionally encountered.
- **PEL** (permissible exposure limit) is the maximum concentration in the workplace for which an employer must have a plan to ensure that the concentration does not exceed the PEL.
- **TWA** (time-weighted average) is the average concentration during an 8-hour workday.
- **STL** (short-term limit) is the concentration that should not be exceeded during any 15-minute period.
- **AN ESL** (American National Standard Exposure Limits) is a set of occupational exposure limits for chemical substances and physical agents in the workplace.
- **US. OSHA Table Z** (Occupational Safety and Health Administration) contains occupational exposure limits and other relevant information.
- **US. ACGIH Threshold Limit Values** (American Conference of Governmental Industrial Hygienists) provide exposure limits for chemical substances.
- **US. California Code of Regulations, Title 8, Section 5155** (Airborne Contaminants) includes occupational exposure limits.
- **US. Texas. Effects Screening Levels** (Texas Commission on Environmental Quality) offers guidance on potential health effects.
- **US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A** provides occupational exposure limits.
- **US. NIOSH: Pocket Guide to Chemical Hazards** offers information on chemical substances.

**Revision Date:** 08/22/2019

**Version:** 1.0
<table>
<thead>
<tr>
<th></th>
<th>STEL</th>
<th>REL</th>
<th>PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35 ppm</td>
<td>25 ppm</td>
<td>50 ppm</td>
</tr>
<tr>
<td></td>
<td>27 mg/m³</td>
<td>18 mg/m³</td>
<td>35 mg/m³</td>
</tr>
</tbody>
</table>


Version: 1.0
Revision Date: 08/22/2019

**Appropriate Engineering Controls**
No data available.

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

**General information:** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection:** Wear goggles/face shield.

**Skin Protection**

**Hand Protection:** No data available.

**Other:** No data available.

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

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

9. Physical and chemical properties

**Appearance**

- **Physical state:** liquid
- **Form:** Spray Aerosol
- **Color:** No data available.
- **Odor:** No data available.
- **Odor threshold:** No data available.
- **pH:** No data available.
- **Melting point/freezing point:** No data available.
- **Initial boiling point and boiling range:** No data available.
- **Flash Point:** -104.44 °C
- **Evaporation rate:** No data available.
- **Flammability (solid, gas):** No data available.

**Upper/lower limit on flammability or explosive limits**

- **Flammability limit - upper (%):** No data available.
- **Flammability limit - lower (%):** No data available.
- **Explosive limit - upper (%):** No data available.
- **Explosive limit - lower (%):** No data available.

**Vapor pressure:** 4,481.5922 - 5,860.5436 hPa (20 °C)

**Vapor density:** No data available.

**Density:** No data available.

**Relative density:** No data available.

**Solubility(ies)**

SDS_US - RE1000012091 5/13
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):
Ethanol LD 50 (Rat): 10,470 mg/kg
Dermal Product: Not classified for acute toxicity based on available data.

**Specified substance(s):**
- Ethanol
  - LD 50 (Rabbit): 17,100 mg/kg

Inhalation Product: Not classified for acute toxicity based on available data.

**Specified substance(s):**
- Propane
  - LC 50 (Mouse): 1,237 mg/l
- Butane
  - LC 50 (Mouse): 1,237 mg/l
- Ethanol
  - LC 50 (Rat): 124.7 mg/l
  - LC 50: > 5 mg/l

Repeated dose toxicity Product: No data available.

**Specified substance(s):**
- 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
- Butane
  - 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
- Ethanol
  - NOAEL (Rat(Male), Oral, 7 - 14 Weeks): 10 %(m) Oral Experimental result, Key study

Skin Corrosion/Irritation Product: No data available.

**Specified substance(s):**
- Ethanol
  - in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation Product: No data available.

**Specified substance(s):**
- Ethanol
  - Rabbit, 1 - 24 hrs: Not irritating

Respiratory or Skin Sensitization Product: No data available.

**Specified substance(s):**
- Ethanol
  - Skin sensitization:, in vivo (Guinea pig): Non sensitising

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.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
- Propane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
- Butane LC 50 (Various, 96 h): 147.54 mg/l QSAR QSAR, Key study
- Ethanol LC 50 (Pimephales promelas, 96 h): 15.3 g/l Experimental result, Key study

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
- Butane LC 50 (Daphnia sp., 48 h): 69.43 mg/l QSAR QSAR, Key study
- Ethanol LC 50 (Ceriodaphnia dubia, 48 h): 5,012 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:
Fish
Product: No data available.

Specified substance(s):
Ethanol NOAEL (Oryzias latipes): 7,900 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
Ethanol LC 50 (Daphnia magna): 454 mg/l Experimental result, Key study NOAEL (Daphnia magna): 9.6 mg/l Experimental result, Key study

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

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

Butane 100 % (385.5 h) Detected in water. Experimental result, Key study 50 % (3.19 d) Detected in water. QSAR, Weight of Evidence study

Ethanol 95 % Detected in water. Experimental result, Key study

BOD/COD Ratio
Product: No data available.

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

Specified substance(s):
Ethanol Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study

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

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments
Propane No data available.
Butane No data available.
Ethanol No data available.

Other adverse effects: No data available.

13. Disposal considerations
Disposal instructions: Wash before disposal. Dispose to controlled facilities.
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>Propane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Butane</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Ethanol</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>2-Propanol, 2-methyl-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>lbs. 1000</td>
</tr>
<tr>
<td>((NH4)(OH))</td>
<td></td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Fire Hazard
- Flammable aerosol

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>Propane</td>
<td>lbs. 100</td>
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<tr>
<td>Butane</td>
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</tr>
<tr>
<td>Ethanol</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>2-Propanol, 2-methyl-</td>
<td>lbs. 100</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>lbs. 1000</td>
</tr>
<tr>
<td>((NH4)(OH))</td>
<td></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>Propane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Butane</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Ethanol</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Phenol, 2,6-bis(1,1-dimethyl)-4-methyl-2-Propanol, 2-methyl-</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Ammonium hydroxide</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>((NH4)(OH))</td>
<td></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
This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Benzene, 1-methoxy-4-(2-propen-1-yl)- Carcinogenic. 05 2011

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

Chemical Identity
- Propane
- Butane
- Ethanol
US. Massachusetts RTK - Substance List
   No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
   Chemical Identity
   - Propane
   - Butane
   - Ethanol

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: Not in compliance with the inventory.
Canada DSL Inventory List: Not 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: Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI): Not in compliance with the inventory.
Canada NDSL Inventory: Not in compliance with the inventory.
Philippines PICCS: Not in compliance with the inventory.
US TSCA Inventory: Not in compliance with the inventory.
New Zealand Inventory of Chemicals: Not 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: Not in compliance with the inventory.
Ontario Inventory: Not in compliance with the inventory.
Taiwan Chemical Substance Inventory: Not in compliance with the inventory.

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

Issue Date: 08/22/2019
Revision Information: No data available.
Version #: 1.0
Further Information: No data available.
Disclaimer: 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.