# Safety Data Sheet

**Product:** Carnation

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Trade Name:** Carnation

### 1.2 Relevant identified product use

**Intended use:** Compound used in customer substance/mixture/product

### 1.3 Details of the manufacturer/supplier of the safety data sheet

**Supplier:** Natures Garden Candles  
42109 State Route 18  
Wellington, OH 44090  
PHONE: 440-647-0100  
FAX: 440-647-0220  
http://www.naturesgardencandles.com  
Department E-mail address: info@naturesgardencandles.com

## 2. Hazards Identification

### 2.1 Classification of the substance or mixture

This mixture has not been tested as a whole. The effects, listed below, are based on evaluation of individual components in accordance with the provisions of the regulation(s) noted below.

#### Classification according to GHS Regulation (EC) No 1272/2008

- **Flammable Liquids, Category 4**  
  H227: Combustible liquid
- **Acute Toxicity Oral, Category 5**  
  H303: May be harmful if swallowed
- **Acute Toxicity Dermal, Category 4**  
  H312: Harmful in contact with skin
- **Skin Corrosion/Irritation, Category 2**  
  H315: Causes skin irritation
- **Sensitization, Skin, Category 1B**  
  H317: May cause an allergic skin reaction
- **Eye Damage/Eye Irritation, Category 2A**  
  H319: Causes serious eye irritation
- **Acute Toxicity Inhalation, Category 5**  
  H333: May be harmful if inhaled
- **Aquatic Acute Toxicity, Category 1**  
  H400: Very Toxic to aquatic life
- **Aquatic Chronic Toxicity, Category 2**  
  H411: Toxic to aquatic life with long lasting effects

#### Classification EU (67/548/EEC, 199/45/EC)

- **N** Dangerous for the Environment  
  - R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- **Xi** Irritant  
  - R36: Irritating to eyes  
  - R38: Irritating to skin  
  - R43: May cause sensitization by skin contact
- **Xn** Harmful  
  - R22: Harmful if swallowed

### 2.2 Label elements

**Labeling (REGULATION (EC) No 1272/2008)**

**Hazard pictograms**
Safety Data Sheet
Product: Carnation

Signal Word: Warning

Hazard statements
- H227: Combustible liquid
- H303: May be harmful if swallowed
- H312: Harmful in contact with skin
- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H319: Causes serious eye irritation
- H333: May be harmful if inhaled
- H400: Very Toxic to aquatic life
- H411: Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention:
- P235: Keep cool
- P264: Wash hands thoroughly after handling
- P272: Contaminated work clothing should not be allowed out of the workplace
- P273: Avoid release to the environment

Response:
- P302 + P352: IF ON SKIN: Wash with soap and water
- P304 + P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses if present and easy to do. Continue rinsing
- P312: Call a POISON CENTER or doctor/physician if you feel unwell
- P333 + P313: If skin irritation or a rash occurs: Get medical advice/attention
- P337 + P313: If eye irritation persists: Get medical advice/attention
- P362: Take off contaminated clothing and wash before reuse
- P363: Wash contaminated clothing before reuse
- P370 + P378: In case of fire: Use Carbon dioxide (CO2), Dry chemical, or Foam for extinction. Do not use a direct water jet on burning material
- P391: Collect Spillage

2.3 Other Hazards
no data available

3. Composition/Information on Ingredients

3.1 Mixtures
This product is a complex mixture of ingredients, which contains among others the following substance(s), presenting a health or environmental hazard within the meaning of the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS):

<table>
<thead>
<tr>
<th>CAS#</th>
<th>EC#</th>
<th>Conc. Range</th>
<th>GHS Classification</th>
<th>EU Classification</th>
</tr>
</thead>
</table>

...
## CAS# Ingredient

<table>
<thead>
<tr>
<th>CAS#</th>
<th>EC#</th>
<th>Conc. Range</th>
<th>GHS Classification</th>
<th>EU Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-12-8</td>
<td>200-456-2</td>
<td>30 - 40 %</td>
<td>H302; H313; H316; H319</td>
<td>Xi - R36; Xn - R22</td>
</tr>
<tr>
<td>101-86-0</td>
<td>202-983-3</td>
<td>20 - 30 %</td>
<td>H303; H316; H317; H400; H411</td>
<td>Xi - R38, R43</td>
</tr>
<tr>
<td>78-70-6</td>
<td>201-134-4</td>
<td>10 - 20 %</td>
<td>H227; H303; H315; H319; H402</td>
<td>Xi - R38</td>
</tr>
<tr>
<td>98-55-5</td>
<td>202-680-6</td>
<td>10 - 20 %</td>
<td>H227; H303; H315; H319; H401</td>
<td>Xi - R36, R38</td>
</tr>
<tr>
<td>68647-72-3</td>
<td>232-433-8</td>
<td>5 - 10 %</td>
<td>H226; H304; H315; H317; H400; H410</td>
<td>R10; N - R50/53; Xi - R38, R43; Xn - R65</td>
</tr>
<tr>
<td>2050-08-0</td>
<td>218-080-2</td>
<td>2 - 5 %</td>
<td>H302; H316; H400; H410</td>
<td>N - R50/53; Xn - R22</td>
</tr>
<tr>
<td>107-75-5</td>
<td>203-518-7</td>
<td>2 - 5 %</td>
<td>H317; H319</td>
<td>Xi - R36, R43</td>
</tr>
<tr>
<td>104-54-1</td>
<td>203-212-3</td>
<td>2 - 5 %</td>
<td>H303; H317</td>
<td>Xi - R43</td>
</tr>
<tr>
<td>128-37-0</td>
<td>204-881-4</td>
<td>1 - 2 %</td>
<td>H316; H400; H410</td>
<td>N - R50/53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See Section 16 for full text of GHS classification codes

Total Hydrocarbon Content (% w/w) = 6.80

### 4. First Aid Measures

#### 4.1 Description of first aid measures

- **Inhalation:** Remove from exposure site to fresh air and keep at rest. Obtain medical advice.
- **Eye Exposure:** Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
- **Skin Exposure:** Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.
- **Ingestion:** Rinse mouth with water and obtain medical advice.

#### 4.2 Most important symptoms and effects, both acute and delayed

- **Symptoms:** no data available
- **Risks:** Refer to Section 2.2 "Hazard Statements"

#### 4.3 Indication of any immediate medical attention and special treatment needed

- **Treatment:** Refer to Section 2.2 "Response"

### 5. Fire-Fighting measures

#### 5.1 Extinguishing media

- **Suitable:** Carbon dioxide (CO2), Dry chemical, Foam
- **Unsuitable:** Do not use a direct water jet on burning material

#### 5.2 Special hazards arising from the substance or mixture


During fire fighting: Water may be ineffective

5.3 Advice for firefighters

Further information: Standard procedure for chemical fires

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

6.2 Environmental precautions

Keep away from drains, soil, and surface and groundwater.

6.3 Methods and materials for containment and cleaning up

Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapors. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.

6.4 Reference to other sections

Not Applicable

7. Handling and Storage

7.1 Precautions for safe handling

Apply according to good manufacturing and industrial hygiene practices with proper ventilation. Do not drink, eat or smoke while handling. Respect good personal hygiene.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry and ventilated area away from heat sources and protected from light in tightly closed original container. Avoid plastic and uncoated metal container. Keep air contact to a minimum.

7.3 Specific end uses

No information available

8. Exposure Controls/Personal Protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Exposure Limits:</th>
<th>ACGIH TWA ppm</th>
<th>ACGIH STEL ppm</th>
<th>OSHA TWA ppm</th>
<th>OSHA STEL ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>128-37-0</td>
<td>Butylated hydroxytoluene</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering Controls: Use local exhaust as needed.

8.2 Exposure controls - Personal protective equipment

Eye protection: Tightly sealed goggles, face shield, or safety glasses with brow guards and side shields, etc. as may be appropriate for the exposure

Respiratory protection: Avoid excessive inhalation of concentrated vapors. Apply local ventilation where appropriate.

Skin protection: Avoid Skin contact. Use chemically resistant gloves as needed.
## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Conforms to Standard</td>
</tr>
<tr>
<td>Odor</td>
<td>Conforms to Standard</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to Pale Yellow (G0-1)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Liquid</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>175 F (79.44 °C)</td>
</tr>
<tr>
<td>Auto flammability</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>None Expected</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>None Expected</td>
</tr>
<tr>
<td>Vapor Pressure (mmHg@20 °C)</td>
<td>0.0887</td>
</tr>
<tr>
<td>%VOC</td>
<td>7.45</td>
</tr>
<tr>
<td>Specific Gravity @ 25 °C</td>
<td>0.9525</td>
</tr>
<tr>
<td>Density @ 25 °C</td>
<td>0.9495</td>
</tr>
<tr>
<td>Refractive Index @ 20 °C</td>
<td>1.5145</td>
</tr>
<tr>
<td>Soluble in</td>
<td>Oil</td>
</tr>
</tbody>
</table>

## 10. Stability and Reactivity

### 10.1 Reactivity

None

### 10.2 Chemical stability

Stable

### 10.3 Possibility of hazardous reactions

None known

### 10.4 Conditions to avoid

None known

### 10.5 Incompatible materials

Strong oxidizing agents, strong acids, and alkalis

### 10.6 Hazardous decomposition products

None known

## 11. Toxicological Information

### 11.1 Toxicological Effects

Acute Toxicity Estimates (ATES) based on the individual Ingredient Toxicity Data utilizing the "Additivity Formula"

- **Acute toxicity - Oral - mg/kg** (LD50: 2,898.55) May be harmful if swallowed
- **Acute toxicity - Dermal - mg/kg** (LD50: 1,736.11) Harmful in contact with skin
- **Acute toxicity - Inhalation - mg/L/4hr** (LC50: 35.77) May be harmful if inhaled
- **Skin corrosion / irritation** Causes skin irritation
- **Serious eye damage / irritation** Causes serious eye irritation
- **Respiratory sensitization** Not classified - the classification criteria are not met
- **Skin sensitization** May cause an allergic skin reaction
Germ cell mutagenicity: Not classified - the classification criteria are not met.
Carcinogenicity: Not classified - the classification criteria are not met.
Reproductive toxicity: Not classified - the classification criteria are not met.
Specific target organ toxicity - single exposure: Not classified - the classification criteria are not met.
Specific target organ toxicity - repeated exposure: Not classified - the classification criteria are not met.
Aspiration hazard: Not classified - the classification criteria are not met.

12. Ecological Information

12.1 Toxicity

Acute aquatic toxicity: Very Toxic to aquatic life.
Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.
Toxicity Data on soil: No data available.
Toxicity on other organisms: No data available.

12.2 Persistence and degradability: No data available.
12.3 Bioaccumulative potential: No data available.
12.4 Mobility in soil: No data available.
12.5 Other adverse effects: No data available.

13. Disposal Conditions

13.1 Waste treatment methods:

Do not allow the product to reach sewage systems. Dispose of in accordance with all local and national regulations. Send to a licensed waste management company. The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.

14. Transport Information

<table>
<thead>
<tr>
<th>Regulator</th>
<th>Class</th>
<th>Pack Group</th>
<th>Sub Risk</th>
<th>UN-nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. DOT (Non-Bulk)</td>
<td>Not Regulated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemicals NOI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADR/RID (International Road/Rail)</td>
<td>Substance, 9  III</td>
<td></td>
<td></td>
<td>UN3082</td>
</tr>
<tr>
<td>Environmentally Hazardous Liquid, n.o.s.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IATA (Air Cargo)</td>
<td>Substance, 9  III</td>
<td></td>
<td></td>
<td>UN3082</td>
</tr>
<tr>
<td>Environmentally Hazardous Liquid, n.o.s.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG (Sea)</td>
<td>Substance, 9  III</td>
<td></td>
<td></td>
<td>UN3082</td>
</tr>
<tr>
<td>Environmentally Hazardous Liquid, n.o.s.</td>
<td></td>
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</tbody>
</table>
15. Regulatory Information

Additional European Regulations:

European Union (EINECS, ELINCS or NLP): 100.00% (by Wt) of the components are listed or exempt.

Additional Asian Regulations:

Australian AICS: 100.00% (by Wt) of the ingredients on AICS or notified.
Chinese IECS: 100.00% (by Wt) of the ingredients on IECS.
Japan ENCS: 100.00% (by Wt) of the ingredients on ENCS, fall within the 1000 kilogram per annum exemption or have been notified.
Korea KECL: 99.90% (by Wt) of the ingredients on KECL, fall within the 100 kilogram per annum exemption or have been notified.
New Zealand NZIoC: 100.00% (by Wt) of the ingredients on NZIoC.
Philippines PICCS: 100.00% (by Wt) of the ingredients on PICCS.

The Status of the following ingredient(s) is NOT known for the registration lists noted:

Lists noted within <> brackets after name

- Carvone : < KECL>
- Phenethyl propionate : < KECL>

16. Other Information

GHS H-Statements referred to under section 3

Total Fractional Values

<table>
<thead>
<tr>
<th>Total Fractional Values</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3.26) Skin Corrosion/Irritation, Category 2</td>
<td>(28.00) Sensitization, Skin, Category 1B</td>
</tr>
<tr>
<td>(5.81) Eye Damage/Eye Irritation, Category 2A</td>
<td>(1.53) Aquatic Acute Toxicity, Category 1</td>
</tr>
<tr>
<td>(5.24) Aquatic Chronic Toxicity, Category 2</td>
<td></td>
</tr>
</tbody>
</table>

Department E-mail address: info@naturesgardencandles.com

Remarks

This safety data sheet is based on the properties of the material known to Natures Garden Fragrances™ at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment Natures Garden Fragrances™ holds no responsibility. This document is not intended for quality assurance purposes.