1 Identification

- **Product identifier**
  - Trade name: Grapefruit Essential Oil
  - Product code: 7473, 7553
  - CAS Number: 8016-20-4

- **Recommended use and restriction on use**
  - **Recommended use**: Fragrance
  - **Restrictions on use**: No relevant information available.

- **Details of the supplier of the Safety Data Sheet**
  - **Manufacturer/Supplier**: NOW Health Group
    395 S. Glen Ellyn Road
    Bloomingdale, IL 60108
    630-545-9098
  - **Emergency telephone number**: ChemTel Inc.
    (800)255-3924 (North America)
    +1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - Flam. Liq. 3 H226 Flammable liquid and vapor.
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Skin Sens. 1 H317 May cause an allergic skin reaction.
  - Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- **Label elements**
  - **GHS label elements**
    The product is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**:
    
    ![GHS02 GHS07 GHS08](image)

- **Signal word**: Danger
- **Hazard statements**:
  - H226 Flammable liquid and vapor.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H304 May be fatal if swallowed and enters airways.
- **Precautionary statements**:
  - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - P233 Keep container tightly closed.
  - P240 Ground/bond container and receiving equipment.
  - P241 Use explosion-proof electrical/ventilating/lighting/equipment.
  - P242 Use only non-sparking tools.

(Cont'd. on page 2)
Trade name: Grapefruit Essential Oil

P243 Take precautionary measures against static discharge.
P261 Avoid breathing mist.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P331 Do NOT induce vomiting.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  8016-20-4 Grapefruit oil

4 First-aid measures

- Description of first aid measures
  - After inhalation:
    Supply fresh air.
    Provide oxygen treatment if affected person has difficulty breathing.
    If experiencing respiratory symptoms: Call a poison center/doctor.
    In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact:
    If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
    If skin irritation or rash occurs: Get medical advice/attention.
  - After eye contact:
    Remove contact lenses if worn.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    Rinse out mouth and then drink plenty of water.
    Do not induce vomiting; immediately call for medical help.
    A person vomiting while lying on their back should be turned onto their side.
  - Most important symptoms and effects, both acute and delayed:
    Breathing difficulty
    Coughing
    Allergic reactions
    Dizziness
    Irritant to skin and mucous membranes.

(Cont'd. on page 3)
Trade name: Grapefruit Essential Oil

- **Danger:**
  - May be fatal if swallowed and enters airways.
  - Danger of impaired breathing.

- **Indication of any immediate medical attention and special treatment needed:**
  - If swallowed or in case of vomiting, danger of entering the lungs.
  - Medical supervision for at least 48 hours.
  - If necessary oxygen respiration treatment.
  - Later observation for pneumonia and pulmonary edema.
  - Contains Grapefruit oil. May produce an allergic reaction.
  - Treat skin and mucous membrane with antihistamine and corticoid preparations.

### 5 Fire-fighting measures

- **Extinguishing media**
  - Suitable extinguishing agents:
    - Foam
    - Gaseous extinguishing agents
    - Carbon dioxide
    - Fire-extinguishing powder
    - Water fog / haze

- **For safety reasons unsuitable extinguishing agents:**
  - Water stream.
  - Water spray

- **Special hazards arising from the substance or mixture**
  - Flammable liquid and vapor.
  - Formation of toxic gases is possible during heating or in case of fire.

- **Advice for firefighters**
  - **Protective equipment:**
    - Wear self-contained respiratory protective device.
    - Wear fully protective suit.

- **Additional information:**
  - Eliminate all ignition sources if safe to do so.
  - Use large quantities of foam as it is partially destroyed by the product.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Ensure adequate ventilation.
  - Keep away from ignition sources.
  - Protect from heat.
  - For large spills, wear protective clothing.
  - For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

- **Environmental precautions**
  - Do not allow to enter sewers/ surface or ground water.
  - Inform respective authorities in case of seepage into water course or sewage system.

- **Methods and material for containment and cleaning up**
  - Wipe up small spills with paper towel and discard.
  - For large spills, absorb with non-combustible liquid-binding material (sand, diatomite, acid binders,
Trade name: Grapefruit Essential Oil

universal binders).
Send for recovery or disposal in suitable receptacles.

**Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

---

**7 Handling and storage**

- **Handling**
  - **Precautions for safe handling:**
    Avoid splashes or spray in enclosed areas.
    Use only in well ventilated areas.
    Handle with care.
    Keep out of reach of children.
    Avoid contact with the eyes and skin.
  - **Information about protection against explosions and fires:**
    Keep ignition sources away - Do not smoke.
    Flammable gas-air mixtures may be formed in empty containers/receptacles.
    Flammable liquid and vapor.

- **Conditions for safe storage, including any incompatibilities**
  - **Requirements to be met by storerooms and receptacles:**
    Avoid storage near extreme heat, ignition sources or open flame.
    Store in cool, dry conditions in well sealed receptacles.
  - **Information about storage in one common storage facility:**
    Store away from foodstuffs.
    Store away from oxidizing agents.
  - **Specific end use(s) No relevant information available.**

---

**8 Exposure controls/personal protection**

- **Control parameters**
  - **Components with limit values that require monitoring at the workplace:**
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Exposure controls**
  - **General protective and hygienic measures:**
    The usual precautionary measures for handling chemicals should be followed.
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Do not inhale gases / fumes / aerosols.
    Avoid contact with the eyes and skin.
  - **Engineering controls:** Provide adequate ventilation.
  - **Protection of hands:**

(Cont'd. of page 3)

(Cont'd. on page 5)
# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: March 01, 2019  
Revision: March 01, 2019

## Trade name: Grapefruit Essential Oil

(Cont’d. of page 4)

### Protective gloves
- **Material of gloves** Rubber gloves
- **Eye protection:**

### Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protection may be required for spills.
- **Limitation and supervision of exposure into the environment**
  No relevant information available.
- **Risk management measures** No relevant information available.

## 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong></td>
</tr>
<tr>
<td><strong>Form:</strong> Liquid</td>
</tr>
<tr>
<td><strong>Color:</strong> According to product specification</td>
</tr>
<tr>
<td><strong>Odor:</strong> Citrus.</td>
</tr>
<tr>
<td><strong>Odor threshold:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>pH-value:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Melting point/Melting range:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Flash point:</strong> 48 °C (118.4 °F) (closed cup)</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong> Not applicable.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong> Product is not explosive.</td>
</tr>
<tr>
<td>However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
</tr>
<tr>
<td><strong>Lower:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Upper:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Oxidizing properties:</strong> Non-oxidizing.</td>
</tr>
<tr>
<td><strong>Vapor pressure:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
</tr>
<tr>
<td><strong>Relative density:</strong> 0.9</td>
</tr>
<tr>
<td><strong>Vapor density:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong> Not determined.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
</tr>
</tbody>
</table>

(Cont’d. on page 6)
Safety Data Sheet
acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Trade name: Grapefruit Essential Oil

Water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Other information No relevant information available.

10 Stability and reactivity
- Reactivity: No relevant information available.
- Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.
- Possibility of hazardous reactions
  Flammable liquid and vapor. Used empty containers may contain product gases which form explosive mixtures with air.
  Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
  Toxic fumes may be released if heated above the decomposition point.
  Reacts with strong oxidizing agents.
- Conditions to avoid: Excessive heat.
- Incompatible materials: Oxidizers
- Hazardous decomposition products
  Under fire conditions only:
  Carbon monoxide and carbon dioxide

11 Toxicological information
- Information on toxicological effects
  - Acute toxicity: Based on available data, the classification criteria are not met.

  LD/LC50 values that are relevant for classification:

<table>
<thead>
<tr>
<th>8016-20-4 Grapefruit oil</th>
<th>8016-20-4 Grapefruit oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td>LD50 &gt;5000 mg/kg (rat)</td>
<td>LD50 &gt;5000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Dermal</td>
<td>Dermal</td>
</tr>
<tr>
<td>LD50 &gt;5000 mg/kg (rabbit)</td>
<td>LD50 &gt;5000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - On the skin: Irritant to skin and mucous membranes.
  - On the eye: Based on available data, the classification criteria are not met.
  - Sensitization: Sensitization possible through skin contact.

- IARC (International Agency for Research on Cancer):
  Substance is not listed.

- NTP (National Toxicology Program):
  Substance is not listed.

- OSHA-Ca (Occupational Safety & Health Administration):

  (Cont'd. on page 7)
Trade name: Grapefruit Essential Oil

Substance is not listed.

- Probable route(s) of exposure:
  Ingestion.
  Inhalation.
  Eye contact.
  Skin contact.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- Aspiration hazard: May be fatal if swallowed and enters airways.

12 Ecological information

- Toxicity
  - Aquatic toxicity Toxic to aquatic life with long lasting effects.
  - Persistence and degradability No relevant information available.
  - Bioaccumulative potential: No relevant information available.
  - Mobility in soil: No relevant information available.
- Additional ecological information
  - General notes: Avoid release to the environment.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- Other adverse effects No relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- Uncleaned packagings
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT Not regulated.
  - ADR/RID/ADN, IMDG, IATA UN1169
- UN proper shipping name
  - DOT Not regulated.
### Trade name: Grapefruit Essential Oil

<table>
<thead>
<tr>
<th>(Cont'd. of page 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- ADR/RID/ADN, IMDG</td>
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<tr>
<td>- IATA</td>
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<tr>
<td>· Transport hazard class(es)</td>
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<tr>
<td>- DOT</td>
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<tr>
<td>- Class</td>
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<tr>
<td>- ADR/RID/ADN</td>
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<td>- Class</td>
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<td>- IMDG, IATA</td>
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<tr>
<td>- Class</td>
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<tr>
<td>· Packing group</td>
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<tr>
<td>- DOT</td>
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<tr>
<td>- ADR/RID/ADN, IMDG, IATA</td>
</tr>
<tr>
<td>· Environmental hazards</td>
</tr>
<tr>
<td>· Marine pollutant:</td>
</tr>
<tr>
<td>· Special precautions for user</td>
</tr>
<tr>
<td>- Danger code (Kemler):</td>
</tr>
<tr>
<td>- EMS Number:</td>
</tr>
<tr>
<td>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
</tr>
<tr>
<td>· Transport/Additional information:</td>
</tr>
<tr>
<td>- ADR/RID/ADN</td>
</tr>
</tbody>
</table>

(Cont'd. on page 9)
Trade name: Grapefruit Essential Oil

Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 5.2.1.8.1)

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IMDG

Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 2.10.2.7)

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IATA

Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each / 10 L net.

---

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - United States (USA)
  - SARA

  - Section 302 (extremely hazardous substances):
    - Substance is not listed.

  - Section 355 (extremely hazardous substances):
    - Substance is not listed.

  - Section 313 (Specific toxic chemical listings):
    - Substance is not listed.

- TSCA (Toxic Substances Control Act)
  - Substance is listed.

- Proposition 65 (California)

  - Chemicals known to cause cancer:
    - Substance is not listed.

  - Chemicals known to cause developmental toxicity for females:
    - Substance is not listed.

  - Chemicals known to cause developmental toxicity for males:

(Cont’d. on page 10)
Trade name: Grapefruit Essential Oil

Substance is not listed.

- Chemicals known to cause developmental toxicity:
  Substance is not listed.

- EPA (Environmental Protection Agency):
  Substance is not listed.

- IARC (International Agency for Research on Cancer):
  Substance is not listed.

- Canadian Domestic Substances List (DSL) (Substances not listed.):
  Substance is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Abbreviations and acronyms:
  ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistant, Bio-accumulable, Toxic
  vPvB: very Persistent and very Bioaccumulative
  OSHA: Occupational Safety & Health Administration
  Flam. Liq. 3: Flammable liquids – Category 3
  Skin Irrit. 2: Skin corrosion/irritation – Category 2
  Skin Sens. 1: Skin sensitisation – Category 1
  Asp. Tox. 1: Aspiration hazard – Category 1

- Sources
  Website, European Chemicals Agency (echa.europa.eu)
  Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
  Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
  Safety Data Sheets, Individual Manufacturers
  SDS Prepared by:
  ChemTel Inc.
  1305 North Florida Avenue
  Tampa, Florida USA 33602-2902
  Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
  Website: www.chemtelinc.com