1 Identification

Product identifier

Product name: n-Propylbenzene

Stock number: B21468, L05530
CAS Number: 103-65-1
EC number: 203-132-9
Index number: 601-024-09-X

Relevant identified uses of the substance or mixture and uses advised against.

Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

GHS02 Flame
Flam. Liq. 3 H226 Flammable liquid and vapour.

GHS08 Health hazard
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

GHS07
STOT SE 3 H335 May cause respiratory irritation.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Signal word Danger

GHS pictograms

GHS02 GHS07 GHS08

Hazard statements

H226 Flammable liquid and vapour.
H335 May cause respiratory irritation.
H304 May be fatal if swallowed and enters airways.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P230 P270 If swallowed: Immediately call a POISON CENTER/doctor.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P405 Store locked up.
P401 Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

B3 - Combustible liquid

Classification system

HMIS ratings (scale 0-4) (Hazardous Materials Identification System)

HEALTH 1
FIRE 2
REACTIVITY 1

Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

CAS# Description: 103-65-1 n-Propylbenzene
Identification number(s):
EC number: 203-132-9
4 First-aid measures

Description of first aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing
Seek medical advice.

Information for doctor

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

Extinguishing media 

Suitable extinguishing agents: Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

- Carbon monoxide
- Carbon dioxide

Advice for firefighters


6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Environmental precautions: Do not allow product to reach sewage system or any water course.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation. Prevention of secondary hazards: Keep away from ignition sources.

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: Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture. Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Storage: Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands:

Impervious gloves

Eye protection: Safety glasses

Body protection: Protective work clothing.
Physical and chemical properties

General Information

Appearance: Liquid
Form: Liquid
Odor: Not determined
Odor threshold: Not determined
pH-value: Not determined

Change in condition
Melting point/Melting range: -100 °C (-148 °F)
Boiling point/Boiling range: 158-160 °C (316-320 °F)
Sublimation temperature/start: Not determined

Flash point: 47 °C (117 °F)
Flammability (solid, gaseous): Not determined
Ignition temperature: Not determined
Decomposition temperature: Not determined
Auto igniting: Not determined

Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures is possible.

Explosion limits:
Lower: Not determined
Upper: Not determined

Vapor pressure: Not determined
Density at 20 °C (68 °F): 0.862 g/cm³ (7.193 lbs/gal)
Relative density: Not determined
Vapor density: Not determined
Evaporation rate: Not determined
Solubility in / Miscibility with
Water: Not determined
Partition coefficient (n-octanol/water): Not determined
Viscosity:
dynamic: Not determined
kinematic: Not determined

Other information: No further relevant information available.

Stability and reactivity

Reactivity: No information known.
Chemical stability: Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions: Reacts with strong oxidizing agents

Conditions to avoid: No further relevant information available.

Incompatible materials: Oxidizing agents

Hazardous decomposition products: Carbon monoxide and carbon dioxide

Toxicological information

Information on toxicological effects

Acute toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.
LD/LC50 values that are relevant for classification: No data
Skin irritation or corrosion: May cause irritation
Eye irritation or corrosion: May cause irritation
Sensitization: No sensitizing effects known.
Germ cell mutagenicity: No effects known.
Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.
Reproductive toxicity: No effects known.
Specific target organ system toxicity - repeated exposure: No effects known.
Specific target organ system toxicity - single exposure: May cause respiratory irritation.
Subacute to chronic toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:
General notes:
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic to aquatic life.
May cause long lasting harmful effects to aquatic life.
Avoid transfer into the environment.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects: No further relevant information available.

Disposal considerations

Waste treatment methods
Recommendation: Consult state, local or national regulations to ensure proper disposal.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
### 14 Transport Information

<table>
<thead>
<tr>
<th>DOT, IMDG, IATA</th>
<th>UN1993</th>
</tr>
</thead>
</table>

**UN proper shipping name**  
DOT: Flammable liquids, n.o.s. (n-Propylbenzene)  
IMDG, IATA: FLAMMABLE LIQUID, N.O.S. (n-Propylbenzene)

**Transport hazard class(es)**

<table>
<thead>
<tr>
<th>DOT</th>
<th>UN-Number</th>
<th>UN1993</th>
</tr>
</thead>
</table>

**Class**  
DOT: 3 Flammable liquids.  
IMDG, IATA: 3 (F1) Flammable liquids

**Packing group**

<table>
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<th>DOT, IMDG, IATA</th>
<th>III</th>
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**Environmental hazards:**

<table>
<thead>
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<th>DOT, IMDG, IATA</th>
<th>Environmentally hazardous substance, liquid</th>
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</table>

**Special precautions for user**

<table>
<thead>
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<th>DOT, IMDG, IATA</th>
<th>Warning: Flammable liquids</th>
</tr>
</thead>
</table>

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

<table>
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<tr>
<th>DOT, IMDG, IATA</th>
<th>Not applicable.</th>
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</thead>
</table>

**Transport/Additional information:**

<table>
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<tr>
<th>DOT</th>
<th>Marine Pollutant (DOT): No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>DOT</th>
<th>UN &quot;Model Regulation&quot;: UN1993, Flammable liquids, n.o.s. (n-Propylbenzene), 3, III</th>
</tr>
</thead>
</table>

### 15 Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**GHS label elements** The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

**GHS pictograms**

<table>
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<tr>
<th>GHSS02</th>
<th>GHSS07</th>
<th>GHSS08</th>
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**Signal word** Danger

**Hazard statements**

| H226 | Flammable liquid and vapour. |
| H335 | May cause respiratory irritation. |
| H304 | May be fatal if swallowed and enters airways. |

**Precautionary statements**

| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor/... |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |

**National regulations**

- All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
- All components of this product are listed on the Canadian Domestic Substances List (DSL).
- SARA Section 313 (specific toxic chemical listings) Substance is not listed.
- California Proposition 65  
  - Prop 65 - Chemicals known to cause cancer Substance is not listed.  
  - Prop 65 - Developmental toxicity Substance is not listed.  
  - Prop 65 - Developmental toxicity, female Substance is not listed.  
  - Prop 65 - Developmental toxicity, male Substance is not listed.  
  - Information about limitation of use: For use only by technically qualified individuals.  
  - Other regulations, limitations and prohibitive regulations  
  - Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.  
  - The conditions of restrictions according to Article 57 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed.
  - Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.
  - Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

**Chemical safety assessment**

A Chemical Safety Assessment has not been carried out.

### 16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Department issuing SDS:** Global Marketing Department

**Date of preparation / last revision:**

11/23/2015

**Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (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  
- EINECS: European Inventory of Existing Commercial Chemical Substances  
- CAS: Chemical Abstracts Service (division of the American Chemical Society)  
- HMIS: Hazardous Materials Identification System (USA)  
- WHMIS: Workplace Hazardous Materials Information System (Canada)

(Contd. on page 5)

USA
Product name: n-Propylbenzene

LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)