

Safety Data Sheet per OSHA HazCom 2012

Page 1/5 Printing date 11/23/2015 Reviewed on 11/12/2014

1 Identification

Product identifier

Product name: n-Propyl acetate

Stock number: 15775 CAS Number: 109-60-4 **EC** number: 203-686-1

Index number: 607-024-00-6

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

Alla Aesai 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 www.alfa.com

www.ana.com I**nformation 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. 2 H225 Highly flammable liquid and vapor.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H336 May cause drowsiness or dizziness. Hazards not otherwise classified No information known.

Label elements

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

Hazard pictograms





GHS02 GHS07

Signal word Danger Hazard statements

H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

Precautionary statements

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

WHMIS classification

B2 - Flammable liquid D2B - Toxic material causing other toxic effects



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



HEALTH Health (acute effects) = 1
IRE Flammability = 3
REACTIVITY Physical Hazard = 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: 109-60-4 n-Propyl acetate Identification number(s): EC number: 203-686-1 Index number: 607-024-00-6

(Contd. of page 1)

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 treatment.
Information for doctor

Meet important symptoms and effects, both acute and deleved No further relevant information as

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

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 and carbon dioxide
Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

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 material to be released to the environment without proper governmental permits.

Methods and material for containment and cleaning up:

Voca event from ignition sources.

Keep away from ignition sources. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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 innition sources away.

Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Storage
Requirements to be met by storerooms and receptacles: Store in a cool location.

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

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

109-60-4 n-Propyl acetate (100.0%)

Long-term value: 840 mg/m³, 200 ppm PEL (USA) Short-term value: 340 mg/m³, 250 ppm Long-term value: 840 mg/m³, 250 ppm Short-term value: 1040 mg/m³, 250 ppm Long-term value: 835 mg/m³, 200 ppm REL (USA) TLV (USA)

EL (Canada)

EV (Canada)

Short-term value: 250 ppm Long-term value: 200 ppm Short-term value: 1.040 mg/m³, 250 ppm Long-term value: 830 mg/m³, 200 ppm

Additional information: No data

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.
Avoid contact with the eyes.
Avoid contact with the eyes and skin

Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment. **Breathing equipment:** Use suitable respirator when high concentrations are present.

(Contd. on page 3)

(Contd. of page 2)

Recommended filter device for short term use:
Use a respirator with organic vapor/acid gas cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU).

Protection of hands:

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

Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Material of gloves Butyl rubber, BR

Penetration time of glove material (in minutes) 60 Glove thickness 0.3 mm

Eye protection: Safety glasses Body protection: Protective work clothing.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:
Form:
Color:

Liquid Colorless Odor: Odor threshold: Fruit-like Not determined pH-value: Not determined.

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:

-92 °C (-134 °F) 99-102 °C (210-216 °F) Not determined

Flash point: Flammability (solid, gaseous) 14 °C (57 °F) Not applicable. 430 °C (806 °F) Not determined Ignition temperature:
Decomposition temperature: Auto igniting: Not determined.

Danger of explosion:
Explosion limits:
Lower:
Upper:
Vapor pressure at 20 °C (68 °F):
Density at 20 °C (68 °F):
Relative density
Vapor density 1.7 Vol % 8 Vol % 33 hPa (25 mm Hg) 0.887 g/cm³ (7.402 lbs/gal) Not determined. Not determined

Vapor density
Evaporation rate
Solubility in / Miscibility with
Water at 20 °C (68 °F):
Partition coefficient (n-octanol/water): Not determined.

Viscosity: dynamic: kinematic: Not determined

Not determined. No <u>further</u> relevant information available. Other information

10 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

11 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:

LD50 8300 mg/kg (mouse) 9370 mg/kg (rat) Dermal LD50 >20 mL/kg (rabbit)

Dermal | LD50 | >20 mL/kg (rabbit)

Skin irritation or corrosion: Repeated exposure may cause skin dryness or cracking.

Eye irritation or corrosion: Causes serious eye irritation.

Sensitization: No sensitizing effects known.

Germ cell mutagenicity: No effects known.

Garcinogenicity: No effects known.

Carcinogenicity: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure:

May cause drowsiness or dizziness.

May cause respiratory irritation.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: No effects known.

Subacute to chronic toxicity: No effects known.

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

12 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.

(Contd. on page 4)

(Contd. of page 3)

Additional ecological information:
General notes:
Do not allow material to be released to the environment without proper governmental permits.
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
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.

13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

1	4	Tran	spo	rt info	rmatioi

UN-Number DOT, IMDG, IATA	UN1276	
UN proper shipping name DOT IMDG, IATA	N-Propyl acetate N-PROPYL ACETATE	

Transport hazard class(es)

DOT



3 Flammable liquids. Label (F1) Flammable liquids Class ĪMDĞ, IATA



Class 3 Flammable liquids.

Packing group DOT, IMDG, IATA 11

Environmental hazards: Not applicable

Warning: Flammable liquids F-E,S-D Special precautions for user EMS Number:

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

Transport/Additional information:

DOT

Marine Pollutant (DOT): No

UN "Model Regulation": UN1276, n-Propyl acetate, 3, II

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) Hazard pictograms







Hazard statements
H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 P501 Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

(Contd. on page 5)



(Contd. of page 4)
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the

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.

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. 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:

RID: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO: The control of Instructions by the "International Civil Aviation Organization" (ICAO)
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 Information System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal doose, 50 percent
LD50: Lethal concentration, 50 percent
LD50: Lethal concentration, 50 percent
LD50: Lethal doose, 50 percent
LD50: Le

LISA