



Safety Data Sheet

According to Regulation (EC) 1907/2006



3385 D(+)-Limonene

Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

D(+)-Limonene

Synonym:

(+)-Carvene, (+)-p-Mentha-1,8-Diene, (R)-4-Isopropenyl-1-Methyl Cyclohexene, R-(+)-Limonene

REACH Registration Number: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: product.safety@panreac.com

1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) n° 1272/2008.

Flam. Liq. 3

Skin Irrit. 2

Skin Sens. 1

Aquatic Acute 1

Aquatic Chronic 1

Hazard Pictograms



Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

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.

P243 Take precautionary measures against static discharge.

Classification (67/548/CEE or 1999/45/CE).

R50/53

N Dangerous for the environment R43

Xi Irritant R38

R10

For the full text of the R-phrases mentioned in this section, see section 16.

Component Composition/Information

Name: D(+)-Limonene

Formula: C₁₀H₁₆ M.= 136,24 CAS [5989-27-5]

EC number (EINECS): 227-813-5

EC index number: 601-029-00-7

First aid

4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Take the person out into the fresh air.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek medical assistance.

4.5 Swallowing:

Drink large amounts of water. Induce vomiting. Seek medical assistance.

Fire-fighting means

5.1 Suitable fire-extinguishing means:

Carbon dioxide (CO₂). Foam. Dry powder.

5.2 Fire-fighting means which must NOT be used:

No specific data.

5.3 Special risks:

Combustible. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. May form explosive mixtures with the air.

5.4 Protective equipment:

Suitable clothing and footwear.

Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

No special indications.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

Handling and storage

7.1 Handling:

Avoid the formation of electrostatic charges.

7.2 Storage:

Well sealed containers. In well ventilated premises. Dry atmosphere. Away from light.

Staff exposure/protection controls

8.1 Technical protective measures:

No special indications.

8.2 Exposure limit control:

: Data not available.

8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection.

8.4 Hand protection:

Use suitable gloves

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use suitable work clothing. Wash hands before breaks and when the job is done.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

Physical and chemical properties

Appearance: liquid

Colour:

N/A

Granulometry: N/A

Odour: Characteristic.

pH:

N/A

Melting point/freezing point: -74 °C
Initial boiling point and boiling range: 176 °C
Flash point: 48 °C
Flammability (solid, gas): N/A
Upper/lower flammability or explosive limits: 6,1 %(V) / 0,7 %(V)
Vapour pressure: 2,1 hPa (20 °C)
Vapour density: N/A
Relative density: (20/4) 0,84
Solubility: Inmiscible with water.
Partition coefficient: n-octanol/water: N/A
Auto-ignition temperature: 255 °C
Decomposition temperature: N/A
Viscosity: N/A

Stability and reactivity

10.1 Conditions which should be avoided:

The product is chemically stable under standar ambient conditions (room temperature).

10.2 Matter which should be avoided:

No specific data.

10.3 Hazardous decomposition products:

No specific data.

10.4 Complementary information:

Tends to polymerize.

Toxicological information

- **Acute toxicity:**

LD50 oral mus : 5.600 mg/kg

LD50 oral rat : 4.400 mg/kg

LD50 ipr mus : 600 mg/kg

- **Dangerous effects for health:**

If fumes inhaled: Irritations to the respiratory tracts. Can cause coughing breathing difficulties
Upon contact with the skin: irritations Risk of cutaneous absorption. Through contact with the eyes: irritations slight If it is absorbed in large quantities: effects on the central nervous system cardiovascular disorders sensitization allergic reaction Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

Environmental information

12.1 Toxicity:

Ecotoxic data not available.

12.2 Persistence and Degradability :

Data not available.

12.3 Bioaccumulative potential:

Data not available.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other possible effects on the environment:

Do not allow it to enter soils or water channels.

Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

Information concerning transport

Overland (ADR):

Technical name: 2-DIMETHYLAMINO-DIPENTENE

UN 2052 Class: 3 CONTAM. MAR PELIG.M.AMB Packaging group: III (D/E)

By sea (IMDG):

Technical name: 2-DIMETHYLAMINO-DIPENTENE

UN 2052 Class: 3 CONTAM. MAR PELIG.M.AMB Packaging group: III EMS 2633

By air (ICAI-IATA):

Technical name: Dipentene

UN 2052 Class: 3 CONTAM. MAR PELIG.M.AMB Packaging group: III

Packaging instructions: CAO 366 PAX 355

Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other information

Other precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash...thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: 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 for extinction.

P391 Collect spillage.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

Labelling (65/548/CEE or 1999/45/CE)

R-phrases(s):	R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R43 May cause sensitisation by skin contact. R38 Irritating to skin. R10 Flammable.
S-phrases(s):	S61 Avoid release to the environment. Refer to special instructions/safety data sheets. S60 This material and its container must be disposed of as hazardous waste. S37 Wear suitable gloves. S24 Avoid contact with skin.

Review number and date: 3 3.11.10

Date published: 3.11.10

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.