



S a f e t y D a t a S h e e t
According to Regulation (EC) 1907/2006
and (EU) 453/2010

1447 Nitrobenzene

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

1.1 Product identifier

Name:

Nitrobenzene

Synonym:

Essence of Mirbane

CAS: [98-95-3]

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 Relevant identified uses of the substance or mixture:

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

2. Identification of dangers

2.1 Classification of the substance or the mixture.

Classification Regulation (CE) nº 1272/2008.

Acute Tox. 3
Acute Tox. 3
Acute Tox. 3
Carc. 2
STOT RE 1
Aquatic Chronic 3
Repr. 1B

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

T Toxic

R52/53
R48/23/24
R40
R23/24/25
R60

2.2 Label elements:

Hazard Pictograms



Signal word

Danger

Hazard statements

H331 Toxic if inhaled.
H311 Toxic in contact with skin.
H301 Toxic if swallowed.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
H360F May damage fertility.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust, fume, gas, mist, vapours or spray.
P264 Wash...thoroughly after handling.
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

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

2.3 Other hazards:

No further relevant information available.

3. Composition/information on ingredients

Name: Nitrobenzene

Formula: C₆H₅NO₂ M.= 123,11 CAS [98-95-3]

EC number (EINECS): 202-716-0

EC index number: 609-003-00-7

4. First aid measures

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. In the event of suffocation, proceed immediately to provide artificial respiration. Seek immediate medical assistance.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing. Take the product out with cotton wool soaked in polyethylene-glycol 400.

4.4 Eyes:

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

4.5 Swallowing:

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

5. Firefighting measures

5.1 Suitable extinguishing media:

Carbon dioxide (CO₂). Alcohol resistant foam. Dry powder.

5.2 Unsuitable extinguishing media:

No specific data.

5.3 Special hazards arising from the substance or mixture:

Combustible. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Auf Rückzündung achten In the event of fire, toxic fumes may form: NO_x.

5.4 Advice for firefighters:

Suitable clothing and footwear.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

No special indications.

6.2 Environmental precautions:

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

6.3 Methods and material for containment and cleaning up:

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.

7. Handling and storage

7.1 Precautions for safe handling:

Handle under an extractor fan. Avoid the formation of electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities:

Well sealed containers. In well ventilated premises. In a cool place. Keep away from flammable substances, sources of ignition and heat.

8. Exposure controls/personal protection

8.1 Exposure controls:

No special indications.

8.2 Control parameters:

VLA-ED: 0,2 ppm = 5 mg/m³ dermal resorption

8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter A. Filter NOX. Filter P3.

8.4 Hand protection:

Use suitable gloves neopren

8.5 Eye/face protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use complete protective equipment. Wash hands and face before breaks and when the job is done. Do not inhale the substance.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

9. Physical and chemical properties

Appearance: liquid

Colour: slightly yellow

Granulometry: N/A

Odour: Characteristic.

pH: 8,1 ((1 g/l))

Melting point/freezing point: 6 °C

Initial boiling point and boiling range: 211 °C

Flash point: 88 °C
Flammability (solid, gas):
N/A
Upper/lower flammability or explosive limits: 40 %(V) / 1,8 %(V)
Vapour pressure: 0,2 hPa (20 °C)
Vapour density: N/A
Relative density:

Insertar Aquí Grupo de repetición

(20/4) 1,205 g/ml
Solubility: 1,9 g/l in water (20 °C)
Partition coefficient: n-octanol/water:
N/A
Auto-ignition temperature: 480 °C
Decomposition temperature: N/A
Kinematic viscosity: N/A
Dynamic viscosity:
N/A

10. Stability and reactivity

10.1 Conditions to avoid:

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

10.2 Incompatible materials:

Reducing agents. Strong acids. Nitric acid. Alkaline metals. Alkaline solutions. Peroxides.

10.3 Hazardous decomposition products:

No specific data.

10.4 Chemical stability:

No specific data.

11. Toxicological information

11.1 Acute toxicity:

LD L0 oral rbt : 700 mg/kg
LD50 oral mus : 590 mg/kg
LD50 oral rat : 780 mg/kg
LD L0 skn rbt : 600 mg/kg
LD50 skn rat : 2.100 mg/kg

11.2 Dangerous effects for health:

Upon contact with the skin: Irritations to the skin and mucosae. Risk of cutaneous absorption. Through contact with the eyes: irritations Systemic effects: metahemoglobinemia with headaches hypotension arrhythmia breathing difficulties spasms cyanosis effects on the central nervous system Effect potentiated by ethanol. Possible risk of impaired fertility. Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

12. Environmental information

12.1 Toxicity:

- EC50 test (mg/l):

Bacteria (Photobacterium phosphoreum) 29,5 mg/l

Classification:

Extr. toxic

- Receptor medium:

Risk for the water environment

Medium

Risk for the land environment

Medium

- Observations:

Extremely toxic in water supplies and soils. Ecotoxicity acute and chronic.

12.2 Persistence and Degradability :

- Test:

- Biotic degradation classification:

BOD5/COD

Biodegradability

- Abiotic degradation depending on pH:

- Observations:

Data not available.

12.3 Bioaccumulative potential:

- Test:

- Bioaccumulation:

Risk

- Observations:

Data not available.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other adverse effects:

Do not allow it to enter soils or water channels.

Water-pollutant product.

13. Disposal considerations

13.1 Waste treatment methods:

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.

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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.

14. Transport information

Overland (ADR):

Technical name: NITROBENZENE

UN 1662 Class: 6.1 PELIG.M.AMB Packaging group: II (D/E)

By sea (IMDG):

Technical name: NITROBENZENE

UN 1662 Class: 6.1 PELIG.M.AMB Packaging group: II

By air (ICAI-IATA):

Technical name: Nitrobenzene

UN 1662 Class: 6.1 PELIG.M.AMB Packaging group: II

Packaging instructions: CAO 662 PAX 654

15. Regulatory information

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

16. Other information

Other precautionary statements

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves, protective clothing, eye protection or face protection.

P281 Use personal protective equipment as required.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P311 Call a POISON CENTER or doctor/physician.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P321 Specific treatment (see on this label).

P322 Specific measures (see on this label).

P330 Rinse mouth.

P361 Remove/Take off immediately all contaminated clothing.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

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

- R-phrase(s): **R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R48/23/24 Toxic: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
R40 Limited evidence of a carcinogenic effect.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R60 May impair fertility.
- S-phrase(s): **S61** Avoid release to the environment. Refer to special instructions/safety data sheets.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S36/37 Wear suitable protective clothing and gloves.
S28b After contact with skin, wash immediately with plenty of water and soap.
S53 Avoid exposure - obtain special instructions before use.

Version and revision date : 5 24.12.2014

Date published: 24.12.2014

In respect of the previous review, changes have been made to the following sections: 2,16

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.