

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 05 Jun 2023

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

3-Chloronitrobenzene

1.1. Catalog No.:

678297

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Acute toxicity, Oral (Category 4), H302
Acute aquatic toxicity (Category 1), H400

2.2. Label elements

2.2.1. Pictogram



2.2.2.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008
Pictogram Signal word Warning
Hazard statement(s)
H302 Harmful if swallowed.

H400 Very toxic to aquatic life Precautionary statement(s)
P273 Avoid release to the environment.
Supplemental Hazard
Statements
none
2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : C₆H₄ClNO₂
Molecular weight : 157,55 g/mol
CAS-No. : 121-73-3
EC-No. : 204-496-1
Hazardous ingredients according to Regulation (EC) No 1272/2008
Component Classification Concentration
1-Chloro-3-nitrobenzene
CAS-No.
EC-No.
121-73-3
204-496-1
Acute Tox. 4; Aquatic Acute 1;
H302, H400
M-Factor - Aquatic Acute: 10
<= 100 %

3.1.1. Formula

C₆H₄ClNO₂

3.1.2. Molecular Weight (g/mol)

157.55

3.1.3. CAS-No.

121-73-3

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire

protection.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry Hands Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Colour: light yellow

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing

point

Melting point/range: 43 - 47 °C - lit.

f) Initial boiling point and

boiling range

236 °C - lit.

g) Flash point 115 °C - closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower

flammability or

explosive limits

No data available

k) Vapour pressure No data available

l) Vapour density No data available

m) Relative density 1,534 g/cm³ at 25 °C

n) Water solubility No data available

o) Partition coefficient: noctanol/
water
No data available
p) Auto-ignition
temperature
No data available q) Decomposition
temperature
No data available
r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties No data available
9.2 Other safety information
No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available
10.2 Chemical stability
Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
No data available
10.5 Incompatible materials
Strong oxidizing agents, Strong bases, Strong reducing agents
10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx),
Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 420 mg/kg
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (1-Chloro-3-nitrobenzene)
3 - Group 3: Not classifiable as to its carcinogenicity to humans (1-Chloro-3-nitrobenzene)
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available Aspiration hazard
No data available
Additional Information
RTECS: CZ0940000
May cause cyanosis., Nausea, Dizziness, Headache, To the best of our knowledge, the chemical, physical,
and toxicological properties have not been thoroughly investigated

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity
 - Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 18 mg/l - 96,0 h
 - Toxicity to daphnia and other aquatic invertebrates
 - EC50 - Daphnia magna (Water flea) - 4,5 mg/l - 48 h
- 12.2 Persistence and degradability
- 12.3 Bioaccumulative potential
 - Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 36 d
 - 0,800 μg/l
 - Bioconcentration factor (BCF): 91
- 12.4 Mobility in soil
 - No data available
- 12.5 Results of PBT and vPvB assessment
 - PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- 12.6 Other adverse effects
 - Very toxic to aquatic life

13. DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods
 - Product
 - Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
 - Contaminated packaging
 - Dispose of as unused product

14. TRANSPORT INFORMATION

- 14.1 UN number
 - ADR/RID: 1578 IMDG: 1578 IATA: 1578
- 14.2 UN proper shipping name
 - ADR/RID: CHLORONITROBENZENES, SOLID
 - IMDG: CHLORONITROBENZENES, SOLID
 - IATA: Chloronitrobenzenes, solid
- 14.3 Transport hazard class(es)
 - ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1
- 14.4 Packaging group
 - ADR/RID: II IMDG: II IATA: II
- 14.5 Environmental hazards
 - ADR/RID: yes IMDG Marine pollutant: yes IATA: no
- 14.6 Special precautions for user
 - No data available

15. REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment
For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!