

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 21 Nov 2022

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

1.1. Product name:

2,6-Dinitrotoluene

1.1. Catalog No.:

685013

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
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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
Carcinogenicity (Category 1B), H350
Germ cell mutagenicity (Category 2), H341
Reproductive toxicity (Category 2), H361f
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Acute toxicity, Oral (Category 3), H301
Specific target organ toxicity - repeated exposure (Category 2), H373
Chronic aquatic toxicity (Category 3), H412

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 Danger Hazard statement(s)

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P201 Obtain special instructions before use.

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

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

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

P311 Call a POISON CENTER /doctor.

Supplemental Hazard

Statements

none

Restricted to professional users.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula : C7H6N2O4

Molecular weight : 182.13 g/mol

CAS-No. : 606-20-2

EC-No. : 210-106-0

Index-No. : 609-049-00-8

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

2,6-Dinitrotoluene

CAS-No.

EC-No.

Index-No.

606-20-2

210-106-0

609-049-00-8

Acute Tox. 3; Muta. 2; Carc.

1B; Repr. 2; STOT RE 2;

Aquatic Chronic 3; H301,

H331, H311, H341, H350,

H361f, H373, H412

<= 100 %

3.1.1. Formula

C7H6N2O4

3.1.2. Molecular Weight (g/mol)

182.13

3.1.3. CAS-No.

606-20-2

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. Take victim immediately to hospital. 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

Carbon oxides, Nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. 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 formation of dust and aerosols. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.

Provide appropriate exhaust ventilation at places where dust is formed.

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.

Storage class (TRGS 510): Combustible solids, toxic

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

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: 56 - 61 °C

f) Initial boiling point and boiling range

285.0 °C

g) Flash point 206.7 °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 0.006 mmHg at 25.0 °C

l) Vapour density No data available

- m) Relative density 1.28 g/cm³ at 111.00 °C
- n) Water solubility No data available
- o) Partition coefficient: noctanol/
water
log Pow: 2.10
- 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
Oxidizing agents, Reducing agents, Strong bases
- 10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO_x)
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 - 177.0 mg/kg(2,6-Dinitrotoluene)
LC50 Inhalation - Rat - 6 h - 240 mg/m³(2,6-Dinitrotoluene)
Remarks: Behavioral:General anesthetic. Lungs, Thorax, or Respiration:Fibrosing alveolitis. Lungs,
Thorax, or Respiration:Changes in Lung Weight.
Skin corrosion/irritation
Skin - Rabbit(2,6-Dinitrotoluene)
Result: Mild skin irritation - 24 h
Serious eye damage/eye irritation
No data available(2,6-Dinitrotoluene)
Respiratory or skin sensitisation
No data available(2,6-Dinitrotoluene)
Germ cell mutagenicity
Laboratory experiments have shown mutagenic effects.(2,6-Dinitrotoluene)
In vitro tests showed mutagenic effects(2,6-Dinitrotoluene)
Carcinogenicity
Carcinogen This product is or contains a component that has been reported to be proba EPA
classification.(2,6-Dinitrotoluene)
Possible human carcinogen(2,6-Dinitrotoluene)
IARC: 2B - Group 2B: Possibly carcinogenic to humans (2,6-Dinitrotoluene)
Reproductive toxicity
Suspected human reproductive toxicant(2,6-Dinitrotoluene)
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.(2,6-

Dinitrotoluene) Specific target organ toxicity - single exposure
No data available(2,6-Dinitrotoluene)
Specific target organ toxicity - repeated exposure
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
Aspiration hazard
No data available(2,6-Dinitrotoluene)
Additional Information
RTECS: XT1925000
Spleen. - (2,6-Dinitrotoluene)

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 17.2 - 50 mg/l - 96.0 h(2,6-Dinitrotoluene)
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 21.70 mg/l - 48 h(2,6-Dinitrotoluene)
Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - 11.00 - 20.00 mg/l - 72 h(2,6-Dinitrotoluene)
12.2 Persistence and degradability
No data available
12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil
No data available(2,6-Dinitrotoluene)
12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
12.6 Other adverse effects
Harmful to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.
Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 3454 IMDG: 3454 IATA: 3454
14.2 UN proper shipping name
ADR/RID: DINITROTOLUENES, SOLID
IMDG: DINITROTOLUENES, SOLID
IATA: Dinitrotoluenes, 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: no 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!