

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 13 Sep 2023

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

#### 1.1. Product name:

DNOC

#### 1.1. Catalog No.:

675518

#### 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 [EU-GHS/CLP]

Germ cell mutagenicity (Category 2)

Acute toxicity, Inhalation (Category 2)

Acute toxicity, Dermal (Category 1)

Acute toxicity, Oral (Category 2)

Skin irritation (Category 2)

Serious eye damage (Category 1)

Skin sensitization (Category 1)

Acute aquatic toxicity (Category 1)

Chronic aquatic toxicity (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Risk of explosion if heated under confinement. Possible risk of irreversible effects. Very toxic by inhalation, in contact with skin and if swallowed. Irritating to skin. Risk of serious damage to eyes. May cause sensitization by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

#### 2.2. Label elements

##### 2.2.1. Pictogram



## 2.2.2.

Signal word Danger

Hazard statement(s)

H300 Fatal if swallowed H310 Fatal in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H341 Suspected of causing genetic defects.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P284 Wear respiratory protection.

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

Supplemental Hazard information (EU)

EUH044 Risk of explosion if heated under confinement.

According to European Directive 67/548/EEC as amended. R-phrase(s)

R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

R44 Risk of explosion if heated under confinement.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R68 Possible risk of irreversible effects.

S-phrase(s)

S36/37 Wear suitable protective clothing and gloves.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : 2-Methyl-4,6-dinitrophenol

3,5-Dinitro-2-hydroxytoluene

4,6-Dinitro-2-methylphenol

DNOC

4,6-Dinitro-o-cresol

Formula : C<sub>7</sub>H<sub>6</sub>N<sub>2</sub>O<sub>5</sub>

Molecular Weight : 198,13 g/mol

Component Concentration

4,6-Dinitro-o-cresol

CAS-No.

EC-No.

Index-No.

534-52-1

208-601-1

609-020-00-X

-

### 3.1.1. Formula

C7H6N2O5

### 3.1.2. Molecular Weight (g/mol)

198.13

### 3.1.3. CAS-No.

534-52-1

## 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

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### 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

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

### 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 fire fighting 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 vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### 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.

### 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)  
no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with workplace control parameters

### 8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

#### Eye/face protection

Face shield and safety glasses 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

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance Form: sheets  
Colour: dark yellow
  - b) Odour no data available
  - c) Odour Threshold no data available
  - d) pH no data available
  - e) Melting point/freezing point  
84,0 °C
  - f) Initial boiling point and boiling range  
no data available
  - g) Flash point no data available
  - 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 no data available
  - 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  
no data available
- 10.3 Possibility of hazardous reactions  
no data available
- 10.4 Conditions to avoid  
no data available
- 10.5 Incompatible materials  
Oxidizing agents, Strong bases
- 10.6 Hazardous decomposition products  
Other decomposition products - no data available

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects  
Acute toxicity  
LD50 Oral - rat - 7,0 mg/kg  
LD50 Dermal - rat - 200,0 mg/kg  
LD50 Dermal - rabbit - 1.000 mg/kg

Skin corrosion/irritation  
Skin - rabbit - Mild skin irritation - 216,00 h  
Serious eye damage/eye irritation  
Eyes - rabbit - Risk of serious damage to eyes. - 24 h - Draize Test  
Respiratory or skin sensitization  
May cause allergic skin reaction.  
Germ cell mutagenicity  
In vitro tests showed mutagenic effects  
Carcinogenicity  
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. 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  
Potential health effects  
Inhalation May be fatal if inhaled. Causes respiratory tract irritation.  
Ingestion May be fatal if swallowed.  
Skin May be fatal if absorbed through skin. Causes skin irritation.  
Eyes Causes eye burns.  
Signs and Symptoms of Exposure  
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting  
Additional Information  
RTECS: GO9625000

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity  
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1,54 mg/l - 96,0 h  
NOEC - Cyprinus carpio (Carp) - 0,25 mg/l - 5,0 d  
NOEC - Cyprinus carpio (Carp) - 1 mg/l - 13,0 d  
LOEC - Cyprinus carpio (Carp) - 0,5 mg/l - 5,0 d  
LOEC - Cyprinus carpio (Carp) - 2 mg/l - 13,0 d  
Toxicity to daphnia and other aquatic invertebrates  
Immobilization EC50 - Daphnia magna (Water flea) - 2,7 mg/l - 48 h  
12.2 Persistence and degradability  
no data available  
12.3 Bioaccumulative potential  
no data available  
12.4 Mobility in soil  
no data available  
12.5 Results of PBT and vPvB assessment  
no data available  
12.6 Other adverse effects  
Very toxic to aquatic life with long lasting effects

## 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 chemical incinerator equipped with an afterburner and scrubber.  
Contaminated packaging

Dispose of as unused product

#### 14. TRANSPORT INFORMATION

14.1 UN number  
ADR/RID: 1598 IMDG: 1598 IATA: 1598  
14.2 UN proper shipping name  
ADR/RID: DINITRO-o-CRESOL  
IMDG: DINITRO-ortho-CRESOL  
IATA: Dinitro-o-cresol  
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

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

#### 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!