

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 04 Mar 2024

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

### 1.1. Product name:

Diuron

### 1.1. Catalog No.:

691438

### 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  
Carcinogenicity (Category 2), H351  
Specific target organ toxicity - repeated exposure (Category 2), H373  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410 Classification according to EU Directives 67/548/EEC or 1999/45/EC  
R40  
Xn Harmful R22, R48/22  
N Dangerous for the  
environment  
R50/53

### 2.2. Label elements

#### 2.2.1. Pictogram



## 2.2.2.

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

H351 Suspected of causing cancer.

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

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

P391 Collect spillage.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard  
Statements

none

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

Synonyms : 3-(3,4-Dichlorophenyl)-1,1-dimethylurea

Formula : C<sub>9</sub>H<sub>10</sub>Cl<sub>2</sub>N<sub>2</sub>O

Molecular weight : 233,09 g/mol

CAS-No. : 330-54-1

EC-No. : 206-354-4

Index-No. : 006-015-00-9

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

Component Classification Concentration

Diuron (ISO)

CAS-No.

EC-No.

Index-No.

330-54-1

206-354-4

006-015-00-9

Acute Tox. 4; Carc. 2; STOT

RE 2; Aquatic Acute 1; Aquatic

Chronic 1; H302, H351, H373,

H410

<= 100 %

Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

Diuron (ISO)

CAS-No.

EC-No.

Index-No.

330-54-1

206-354-4

006-015-00-9

Xn, N, Carc.Cat.3, R22 - R40 -

R48/22 - R50/53

<= 100 %

### 3.1.1. Formula

C<sub>9</sub>H<sub>10</sub>Cl<sub>2</sub>N<sub>2</sub>O

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

233.10

### 3.1.3. CAS-No.

330-54-1

## 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. 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), Hydrogen chloride gas

### 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

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.

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

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).

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: powder
- Colour: white
- b) Odour amine-like
- c) Odour Threshold No data available
- d) pH No data available
- e) Melting point/freezing point
- Melting point/range: 156

## 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
- Do not heat above melting point.
- 10.5 Incompatible materials
- Strong oxidizing agents, Strong acids, Strong bases
- 10.6 Hazardous decomposition products
- 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 - male - 1.017 mg/kg
- LC50 Inhalation - Rat - male and female - 4 h - > 5,05 mg/l
- (OECD Test Guideline 403)
- LD50 Dermal - Rat - male and female - > 5.000 mg/kg
- (OECD Test Guideline 402)
- Skin corrosion/irritation
- Skin - Rabbit
- Result: No skin irritation - 4 h
- (OECD Test Guideline 404)
- Serious eye damage/eye irritation
- Eyes - Rabbit
- Result: No eye irritation
- (OECD Test Guideline 405)
- Respiratory or skin sensitisation
- Maximisation Test (GPMT) - Guinea pig
- Result: Does not cause skin sensitisation.
- (OECD Test Guideline 406)
- Germ cell mutagenicity
- Ames test
- S. typhimurium
- Result: negative
- Directive 67/548/EEC, Annex V, B.12.
- Mouse - male and female
- Result: negative
- Carcinogenicity
- Carcinogenicity - Rat - male and female - Oral
- Blood: Changes in spleen. This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.
- Limited evidence of carcinogenicity in animal studies

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

Developmental Toxicity - Rat - Oral

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Developmental Toxicity - Rat - Oral

Specific Developmental Abnormalities: Musculoskeletal system.

Developmental Toxicity - Mouse - Subcutaneous

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus:

Fetal death. Specific Developmental Abnormalities: Eye, ear.

Specific target organ toxicity - single exposure

No data available Specific target organ toxicity - repeated exposure

Oral - May cause damage to organs through prolonged or repeated exposure. - Blood

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity - Rat - male - Oral - No observed adverse effect level - 6,7 mg/kg

Blood: Other changes.

RTECS: YS8925000

Central nervous system depression, Gastrointestinal disturbance, Liver injury may occur., Kidney injury may occur., Blood disorders, 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 static test LC50 - *Oncorhynchus mykiss* (rainbow trout) - 14,7 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and

other aquatic

invertebrates

static test EC50 - *Daphnia magna* (Water flea) - 1,4 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae static test EC50 - *Desmodesmus subspicatus* (*Scenedesmus subspicatus*) -

0,022 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - 3.080 mg/l - 30 min

(OECD Test Guideline 209)

### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 0 % - Not biodegradable

(OECD Test Guideline 301F)

### 12.3 Bioaccumulative potential

Bioaccumulation *Gambusia affinis* (Mosquito fish) - 72 h

- 159 µg/l

Bioconcentration factor (BCF): 290

### 12.4 Mobility in soil

No data available

### 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

Very toxic to aquatic life with long lasting effects.

No data available

## 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: 3077 IMDG: 3077 IATA: 3077  
14.2 UN proper shipping name  
ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Diuron (ISO))  
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Diuron (ISO))  
IATA: Environmentally hazardous substance, solid, n.o.s. (Diuron (ISO))  
14.3 Transport hazard class(es)  
ADR/RID: 9 IMDG: 9 IATA: 9  
14.4 Packaging group  
ADR/RID: III IMDG: III IATA: III  
14.5 Environmental hazards  
ADR/RID: yes IMDG Marine pollutant: yes IATA: yes  
14.6 Special precautions for user  
Further information  
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

#### 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  
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!