# SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

**CUROX® CC-P3**

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date</th>
<th>SDS Number</th>
<th>Date of last issue</th>
<th>Date of first issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>01.02.2019</td>
<td>600000000031</td>
<td>22.06.2018</td>
<td>09.06.2016</td>
</tr>
</tbody>
</table>

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Trade name**: CUROX® CC-P3

**REACH Registration Number**: 01-0000018981-62-0000

**Substance name**: Poly-1,4-diisopropylbenzene

**EC-No.**: 449-400-0

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use of the Substance/Mixture**: polymerisation initiators, Fire retardant

### 1.3 Details of the supplier of the safety data sheet

**Company**: United Initiators GmbH

Dr.-Gustav-Adolph-Str. 3

82049 Pullach

**E-mail address of person responsible for the SDS**: contact@united-in.com

### 1.4 Emergency telephone number

+49 / 89 / 74422 – 0 (24 h)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

Long-term (chronic) aquatic hazard, Category 4

H413: May cause long lasting harmful effects to aquatic life.

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

**Hazard statements**: H413 May cause long lasting harmful effects to aquatic life.

**Precautionary statements**: Prevention:

P273 Avoid release to the environment.

Disposal:
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.

SECTION 3: Composition/information on ingredients

3.1 Substances
Substance name: Poly-1,4-diisopropylbenzene
EC-No.: 449-400-0
Chemical nature: Solid organic

<table>
<thead>
<tr>
<th>Component</th>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poly-1,4-diisopropylbenzene</td>
<td>25822-43-9</td>
<td>449-400-0</td>
<td>&lt;= 100</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1 Description of first aid measures
General advice: Move out of dangerous area. Do not leave the victim unattended.

Protection of first-aiders: First Aid responders should pay attention to self-protection and use the recommended protective clothing.

If inhaled: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of eye contact: Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.

If swallowed: Keep respiratory tract clear.

4.2 Most important symptoms and effects, both acute and delayed
None known.
4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
- Water spray jet
- Alcohol-resistant foam
- Carbon dioxide (CO2)
- Dry chemical

Unsuitable extinguishing media:
- High volume water jet

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters

Special protective equipment for firefighters:
Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

Specific extinguishing methods:
- Do not use a solid water stream as it may scatter and spread fire.
- Remove undamaged containers from fire area if it is safe to do so.
- Use water spray to cool unopened containers.

Further information:
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
- Use personal protective equipment.
- Avoid dust formation.
- Follow safe handling advice and personal protective equipment recommendations.
- Treat recovered material as described in the section "Disposal considerations".

6.2 Environmental precautions

Environmental precautions:
- Prevent product from entering drains.
- If the product contaminates rivers and lakes or drains inform
respective authorities.

6.3 Methods and material for containment and cleaning up
Methods for cleaning up: Clear spills immediately.
To clean the floor and all objects contaminated by this material, use plenty of water.
Soak up with inert absorbent material.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

6.4 Reference to other sections
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Technical measures: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Advice on safe handling: Provide sufficient air exchange and/or exhaust in work rooms. Smoking, eating and drinking should be prohibited in the application area. Wash thoroughly after handling. For personal protection see section 8.
Advice on protection against fire and explosion: Provide appropriate exhaust ventilation at places where dust is formed.
Hygiene measures: Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers: Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations.

7.3 Specific end use(s)
Specific use(s): For further information, refer to the product technical data sheet.
SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly-1,4-diisopropylbenzene</td>
<td>Workers</td>
<td>Inhalation</td>
<td>Long-term systemic effects</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Workers</td>
<td>Skin contact</td>
<td>Long-term systemic effects</td>
<td>100 mg/kg bw/day</td>
</tr>
</tbody>
</table>

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly-1,4-diisopropylbenzene</td>
<td>Fresh water</td>
<td>0.001 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.001 mg/l</td>
</tr>
<tr>
<td></td>
<td>Intermittent use/release</td>
<td>0.001 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>310 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>310 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Sewage treatment plant</td>
<td>30 mg/l</td>
</tr>
<tr>
<td></td>
<td>Soil</td>
<td>61.8 mg/kg</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Engineering measures
Minimize workplace exposure concentrations.

Personal protective equipment

Eye protection: Tightly fitting safety goggles
Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.
Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection
Material: butyl-rubber
Break through time: >= 480 min
Glove thickness: 0.5 mm

Remarks: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure.
Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter.

Filter type: Filter type P

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>flakes</td>
</tr>
<tr>
<td>Colour</td>
<td>White to light yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>122 - 215 °C (1,013 hPa)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt; 295 °C (994 hPa)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit / Lower flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt; 0.0000013 hPa (25 °C)</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.02 (23 °C)</td>
</tr>
<tr>
<td>Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Bulk density</td>
<td>400 kg/m³ (20 °C)</td>
</tr>
</tbody>
</table>
10.1 Reactivity
Stable under recommended storage conditions.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions : Stable under recommended storage conditions.
Dust may form explosive mixture in air.

10.4 Conditions to avoid
Conditions to avoid : No data available

10.5 Incompatible materials
Materials to avoid : No data available

10.6 Hazardous decomposition products
Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Not classified based on available information.

Product:
Acute oral toxicity: LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 423
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity: LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Components:
Poly-1,4-diisopropylbenzene:

Acute oral toxicity: LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 423
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity: LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation
Not classified based on available information.

Product:
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Components:
Poly-1,4-diisopropylbenzene:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation
Not classified based on available information.

Product:
Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation
Components:

Poly-1,4-diisopropylbenzene:
Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

Product:

Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Components:

Poly-1,4-diisopropylbenzene:
Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Germ cell mutagenicity
Not classified based on available information.

Product:

Genotoxicity in vitro : Method: OECD Test Guideline 476
Result: negative

Method: OECD Test Guideline 471
Result: negative

Components:

Poly-1,4-diisopropylbenzene:
Genotoxicity in vitro : Method: OECD Test Guideline 476
Result: negative

Method: OECD Test Guideline 471
Result: negative
Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

Components:

Poly-1,4-diisopropylbenzene:
Effects on fertility: Species: Rat
Application Route: oral (gavage)
General Toxicity - Parent: NOAEL: 1,000 mg/kg body weight
General Toxicity F1: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 421

Effects on foetal development: Species: Rat
General Toxicity Maternal: NOAEL: 1,000 mg/kg body weight
Developmental Toxicity: NOAEL: 1,000 mg/kg body weight
Method: OECD Test Guideline 414

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Repeated dose toxicity

Product:
Species: Rat, male and female
NOAEL: 1,000 mg/kg
Application Route: Oral
Exposure time: 90 d
Method: OECD Test Guideline 408

Components:

Poly-1,4-diisopropylbenzene:
Species: Rat, male and female
NOAEL: 1,000 mg/kg
Application Route: Oral
Exposure time: 90 d
Method: OECD Test Guideline 408

Aspiration toxicity
Not classified based on available information.

Further information

Product:
**SAFETY DATA SHEET**
according to Regulation (EC) No. 1907/2006

**CUROX® CC-P3**

### Version 2.0
Revision Date: 01.02.2019
SDS Number: 600000000031
Date of last issue: 22.06.2018
Date of first issue: 09.06.2016

Remarks : No data available

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Product:**

**Toxicity to fish**
- LC50 (Danio rerio (zebra fish)): > 100 mg/l
- Exposure time: 96 h

**Toxicity to daphnia and other aquatic invertebrates**
- EC50 (Daphnia magna (Water flea)): > 100 mg/l
- Exposure time: 48 h
- Method: OECD Test Guideline 202

**Toxicity to algae**
- EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
- Exposure time: 72 h
- Test Type: static test
- NOEC (Pseudokirchneriella subcapitata (green algae)): 100 mg/l
- Exposure time: 72 h
- Test Type: static test

**Toxicity to microorganisms**
- EC50 (Bacteria): > 300 mg/l
- Exposure time: 3 h
- Method: OECD Test Guideline 209

**Ecotoxicology Assessment**

**Acute aquatic toxicity** : This product has no known ecotoxicological effects.

**Chronic aquatic toxicity** : May cause long lasting harmful effects to aquatic life.

**Components:**

**Poly-1,4-diisopropylbenzene:**

**Toxicity to fish**
- LC50 (Danio rerio (zebra fish)): > 100 mg/l
- Exposure time: 96 h

**Toxicity to daphnia and other aquatic invertebrates**
- EC50 (Daphnia magna (Water flea)): > 100 mg/l
- Exposure time: 48 h
- Method: OECD Test Guideline 202

**Toxicity to algae**
- EC50 (Pseudokirchneriella subcapitata (green algae)): > 100
12.2 Persistence and degradability

**Product:**
Biodegradability: Result: Not readily biodegradable.
Method: OECD Test Guideline 301B

**Components:**

**Poly-1,4-diisopropylbenzene:**
Biodegradability: Result: not rapidly degradable
Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential

**Components:**

**Poly-1,4-diisopropylbenzene:**
Partition coefficient: \( \log \text{Pow}: 9.2 \) (30 °C)

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

**Product:**
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

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. May cause long lasting harmful effects to aquatic life.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

**Product**

- The product should not be allowed to enter drains, water courses or the soil.
- Do not contaminate ponds, waterways or ditches with chemical or used container.
- Dispose of wastes in an approved waste disposal facility.

**Contaminated packaging**

- Empty remaining contents.
- Dispose of as unused product.
- Do not re-use empty containers.
- Dispose of in accordance with local regulations.

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### SECTION 14: Transport information

#### 14.1 UN number

Not regulated as a dangerous good

#### 14.2 UN proper shipping name

Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.
SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
Not applicable

REACH - List of substances subject to authorisation (Annex XIV)
Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer
Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants
Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals
Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)
Not applicable

Not applicable

The components of this product are reported in the following inventories:
ENCS (JP) : On the inventory, or in compliance with the inventory
ISHL (JP) : On the inventory, or in compliance with the inventory
TCSI (TW) : On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment
A Chemical Safety Assessment has been carried out for this substance.
For further information see eSDS.

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regula-
SAFETY DATA SHEET
generated with the help of Regulation (EC) No. 1907/2006

CUROX®

Version 2.0 Revision Date: 01.02.2019 SDS Number: 600000000031 Date of last issue: 22.06.2018 Date of first issue: 09.06.2016

Further information

Other information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification. These safety instructions also apply to empty packaging which may still contain product residues.

Sources of key data used to compile the Safety Data Sheet


The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

IE / EN