1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CUROX® CC-P3

Recommended use of the chemical and restrictions on use
Recommended use : polymerisation initiators
Fire retardant

Manufacturer or supplier’s details
Company : United Initiators GmbH
Address : Dr.-Gustav-Adolph-Str. 3
82049 Pullach 09

Emergency telephone number : +49 / 89 / 74422 – 0 (24 h)
E-mail address : contact@united-in.com

2. HAZARDS IDENTIFICATION

GHS Classification
Long-term (chronic) aquatic hazard : Category 4

GHS label elements
Hazard pictograms : Not applicable
Signal word : Not applicable
Hazard statements : H413 May cause long lasting harmful effects to aquatic life.
Precautionary statements : Prevention:
P273 Avoid release to the environment.
Disposal:
P501 Dispose of contents and container according to wastes control act.

Other hazards which do not result in classification
No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Chemical nature : Solid organic
4. FIRST AID MEASURES

General advice: Move out of dangerous area. Do not leave the victim unattended.

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

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

If swallowed: Keep respiratory tract clear.

Most important symptoms and effects, both acute and delayed: None known.

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

Notes to physician: Treat symptomatically and supportively.

5. FIREFIGHTING MEASURES

Suitable and unsuitable extinguishing media

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

Unsuitable extinguishing media: High volume water jet

Specific extinguishing methods: 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.

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.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
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".

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

Methods and materials for containment and 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.

7. HANDLING AND STORAGE

Technical measures:
See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Advice on protection against fire and explosion:
Provide appropriate exhaust ventilation at places where dust is formed.

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.

Conditions for safe storage:
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.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Engineering measures
Minimize workplace exposure concentrations.

Personal protective equipment
Among the following personal protective equipment, the PPEs which require safety certification need to be certified by KOSHA.

Respiratory protection
In the case of dust or aerosol formation use respirator with an approved filter.

Filter type
Filter type P

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 potential.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: flakes
Colour: White to light yellow
Odour: characteristic
Odour Threshold: No data available
### 10. STABILITY AND REACTIVITY

**Chemical stability and possibility of hazardous reactions**: Stable under recommended storage conditions. Stable under recommended storage conditions. Dust may form explosive mixture in air.

**Conditions to avoid**: No data available
Incompatible materials : No data available

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data available

Health hazard information

Acute toxicity

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 inhalation toxicity : Remarks: No data available

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

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

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

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

Respiratory or skin sensitisation

**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.

Carcinogenicity
No data available

Germ cell mutagenicity

**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

Reproductive toxicity

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
No data available

STOT - repeated exposure
No data available

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
No data available

Experience with human exposure
No data available

Toxicology, Metabolism, Distribution
No data available

Neurological effects
No data available
Further information

**Product:**
Remarks : No data available

12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**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 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.

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

Bioaccumulative potential

Components:

Poly-1,4-diisopropylbenzene:
Partition coefficient: n-octanol/water : log Pow: 9.2 (30 °C)

Mobility in soil
No data available

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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13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: 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.

Disposal precautions
Dispose of contents and container according to wastes control act.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

UN number: Not applicable
Proper shipping name: Not applicable
Class: Not applicable
Subsidiary risk: Not applicable
Packing group: Not applicable
Labels: Not applicable
EmS Code: Not applicable
Marine pollutant: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations
Refer to section 15 for specific national regulation.

Special precautions for user
Not applicable
15. REGULATORY INFORMATION

National regulatory information

Regulation under the Occupational Safety and Health Act

Harmful Substances Prohibited from Manufacturing
Not applicable

Harmful Substances Required Permission for Manufacture
Not applicable

Harmful Agents to be kept below Occupational Exposure Limits
Not applicable

Harmful Agents Required to be kept below Permission Levels
Not applicable

Hazardous substances requiring management
Not applicable

Controlled Substances Subject to Environment Monitoring
Not applicable

Controlled Substances Subject to Health Examination
Not applicable

Act on the Registration and Evaluation, etc. of Chemical Substances, Chemicals Control Act

Toxic Chemicals
Not applicable

Restricted Chemicals
Not applicable

Prohibited Chemicals
Not applicable

Toxic Release Inventory
Not applicable

Accident Precaution Chemicals
Not applicable

Dangerous Substances Safety Management Act
Not Applicable to Dangerous Materials

Wastes Control Act
Industrial waste
Follow article 13 of the act to dispose the product waste

Other requirements in domestic and other countries

The components of this product are reported in the following inventories:

DSL: This product contains the following components that are not on the Canadian DSL nor NDSL.
Poly-1,4-diisopropylbenzene

AICS : Not in compliance with the inventory
NZIoC : Not in compliance with the inventory
ENCS : On the inventory, or in compliance with the inventory
ISHL : On the inventory, or in compliance with the inventory
KECI : Not in compliance with the inventory
PICCS : Not in compliance with the inventory
IECSC : Not in compliance with the inventory
TCSI : On the inventory, or in compliance with the inventory
TSCA : Not On TSCA Inventory

16. OTHER INFORMATION

Further information


Issuing date : 2018/05/18

Revision number and date
Number of Revision : 1.2
Revision Date : 2019/02/01

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.

Date format : yyyy/mm/dd

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -
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Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals inBulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

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