CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

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

1.1 Product identifier

Trade name : CUROX®CUHP

REACH Registration Number : 01-2119475796-19

Substance name : Cumene hydroperoxide

Index-No. : 617-002-00-8

EC-No. : 201-254-7

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

Use of the Sub- : polymerisation initiators

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : United Initiators GmbH

Dr.-Gustav-Adolph-Str. 3

82049 Pullach

Telephone : +49 / 89 / 74422 - 0

E-mail address of person

responsible for the SDS

: contact@united-in.com

1.4 Emergency telephone number

+44 1235 239670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Organic peroxides, Type F H242: Heating may cause a fire.

Acute toxicity, Category 4 H302: Harmful if swallowed.

Acute toxicity, Category 3 H331: Toxic if inhaled.

Acute toxicity, Category 4 H312: Harmful in contact with skin.

Skin corrosion, Sub-category 1B H314: Causes severe skin burns and eye damage.



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Serious eye damage, Category 1 H318: Causes serious eye damage.

Carcinogenicity, Category 1B H350: May cause cancer.

Specific target organ toxicity - single exposure, Category 3, Respiratory system

H335: May cause respiratory irritation.

Specific target organ toxicity - repeated

exposure, Category 2

H373: May cause damage to organs through pro-

longed or repeated exposure.

Aspiration hazard, Category 1 H304: May be fatal if swallowed and enters air-

ways.

Long-term (chronic) aquatic hazard, Cat-

egory 2

H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :











Signal word : Danger

Hazard statements : H242 Heating may cause a fire.

H302 + H312 Harmful if swallowed or in contact with skin. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H350 May cause cancer.

H373 May cause damage to organs through prolonged or

repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible

materials.

P233 Keep container tightly closed.

P235 Keep cool.

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

P262 Do not get in eyes, on skin, or on clothing.

P273 Avoid release to the environment.



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

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

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/ attention if you feel unwell.

P315 Get immediate medical advice/ attention.

P331 Do NOT induce vomiting.

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Disposal:

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

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 : Cumene hydroperoxide

Index-No. : 617-002-00-8

EC-No. : 201-254-7

Chemical nature : Organic Peroxide

Components

Chemical name	CAS-No.	Concentration (% w/w)
	EC-No.	
Cumene hydroperoxide	80-15-9	>= 80 - < 85
	201-254-7	
Cumene	98-82-8	>= 10 - < 15
	202-704-5	
Benzenemethanol, al-	617-94-7	>= 1 - < 5
pha,alpha-dimethyl-	210-539-5	
acetophenone	98-86-2	>= 1 - < 5



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

202-708-7

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off contaminated clothing and shoes immediately.

Call a physician immediately.

Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical

advice.

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

Symptoms of poisoning may appear several hours later. No artificial respiration, mouth-to-mouth or mouth to nose. Use

suitable instruments/apparatus.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

If inhaled : Administer oxygen if breathing is difficult or cyanosis is ob-

served.

Call a physician immediately.

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Contact a poison control center.

Respiratory tract burning possible if aerosols are inhaled. Call a physician or poison control centre immediately. If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

In case of skin contact : If symptoms persist, call a physician.

Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficul-

ty.

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing

and shoes.

Wash contaminated clothing before re-use.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tis-

sue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses.

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Call a physician immediately.

Contact a poison control center. Rinse mouth thoroughly with water.

Keep respiratory tract clear.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Harmful if swallowed or in contact with skin.

May be fatal if swallowed and enters airways.

Causes serious eye damage.

Toxic if inhaled.

May cause respiratory irritation.

May cause cancer.

May cause damage to organs through prolonged or repeated

exposure.

Causes severe burns.

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

Specific hazards during fire-

fighting

Risk of explosion if heated under confinement.

Possible emission of gaseous decomposition products may

lead to a dangerous pressure build-up.

Avoid confinement.

Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which

may auto-ignite.

The product burns violently.

Flash back possible over considerable distance.

Do not allow run-off from fire fighting to enter drains or water



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

courses.

Vapours may form explosive mixtures with air.

The product will float on water and can be reignited on surface

water.

Cool closed containers exposed to fire with water spray.

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary. Use personal protective equipment.

Specific extinguishing meth-

ods

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 : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use a water spray to cool fully closed containers.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Follow safe handling advice and personal protective equip-

ment recommendations.

Beware of vapours accumulating to form explosive concentra-

tions. Vapours can accumulate in low areas.

Use personal protective equipment.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Never return spills in original containers for re-use.

Treat recovered material as described in the section "Disposal

considerations".

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

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 : Contact with incompatible substances can cause decomposi-

CUROX®CUHP



Version 2.1

Revision Date: 21.11.2023

SDS Number: 600000000424

Date of last issue: 07.08.2023 Date of first issue: 05.10.2022

tion at or below SADT.

Clear spills immediately.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

To clean the floor and all objects contaminated by this materi-

al, use plenty of water.

Soak up with inert absorbent material.

Isolate waste and do not reuse.

Non-sparking tools should be used.

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 deter-

mine which regulations are applicable.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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 : Open drum carefully as content may be under pressure.

Protect from contamination.

Do not swallow.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. Avoid formation of aerosol.

Take precautionary measures against static discharges. Never return any product to the container from which it was

originally removed.

Provide sufficient air exchange and/or exhaust in work rooms.

Avoid confinement.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Wash thoroughly after handling. For personal protection see section 8.

Advice on protection against

fire and explosion

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Keep away from combustible material. Do not spray on a naked flame or any incandescent material.



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Hygiene measures : Avoid contact with skin, eyes and clothing. 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

Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Store in cool place. Contamination may result in dangerous pressure increases - closed containers may rupture. Prevent unauthorized access. Observe label precautions. Store in accordance with the particular national regulations. Avoid impurities (e.g. rust, dust, ash), risk of decomposition. 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.

Advice on common storage : Keep away from strong acids, bases, heavy metal salts and

other reducing substances.

Recommended storage tem-

perature

< 30 °C

Further information on stor-

age stability

No decomposition if stored normally.

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

Occupational Exposure Limits

Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		
Cumene	98-82-8	TWA	25 ppm	GB EH40
			125 mg/m3	
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	50 ppm 250 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

T.	i			0000/00/50
		TWA	20 ppm	2000/39/EC
			100 mg/m3	
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	50 ppm 250 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	10 ppm 50 mg/m3	2019/1831/E U
	Further information: A skin notation assigned to the occupational exposure limit value indicates the possibility of significant uptake through the skin., Indicative			
		STEL	50 ppm 250 mg/m3	2019/1831/E U
	Further information: A skin notation assigned to the occupational exposure limit value indicates the possibility of significant uptake through the skin., Indicative			

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
Cumene hydroperox- ide	Workers	Inhalation	Long-term systemic effects	6 mg/m3
Cumene	Workers	Inhalation	Long-term systemic effects	100 mg/m3
	Workers	Inhalation	Acute local effects	250 mg/m3
	Workers	Skin contact	Long-term systemic effects	15.4 mg/kg bw/day
acetophenone	Workers	Inhalation	Long-term systemic effects	22 mg/m3
	Workers	Inhalation	Acute local effects	
	Remarks:No hazard identified			
	Workers	Skin contact	Long-term systemic effects	6.3 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	5.4 mg/m3
	Consumers	Skin contact	Long-term systemic effects	3.1 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	3.1 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	6.25 mg/kg bw/day

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
Cumene hydroperoxide	Fresh water	0.0031 mg/l
	Marine water	0.00031 mg/l
	Sewage treatment plant	0.39 mg/l
	Fresh water sediment	0.023 mg/kg dry



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

		weight (d.w.)
	Marine sediment	0.002 mg/kg dry
		weight (d.w.)
	Soil	0.0029 mg/kg dry weight (d.w.)
Cumene	Fresh water	0.035 mg/l
	Intermittent use/release	0.012 mg/l
	Marine water	0.004 mg/l
	Fresh water sediment	3.22 mg/kg
	Marine sediment	0.322 mg/kg
	Sewage treatment plant	200 mg/l
	Soil	0.624 mg/kg

8.2 Exposure controls

Engineering measures

Minimize workplace exposure concentrations.

Personal protective equipment

Eye/face protection : Ensure that eyewash stations and safety showers are close to

the workstation location.

Please follow all applicable local/national requirements when

selecting protective measures for a specific workplace.

Always wear eye protection when the potential for inadvertent

eye contact with the product cannot be excluded.

Tightly fitting safety goggles

Please wear suitable protective goggles. Also wear face pro-

tection if there is a splash hazard.

Hand protection

Material : Nitrile rubber
Break through time : < 30 min
Glove thickness : 0.40 mm

Material : butyl-rubber
Break through time : < 30 min
Glove thickness : 0.70 mm

Remarks : The data about break through time/strength of material are

standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. 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 re-

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

sistance data and an assessment of the local exposure poten-

tial.

Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable

suits) to avoid exposed skin surfaces.

Wear as appropriate:

Flame retardant antistatic protective clothing.

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

Filter type : ABEK-filter

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : Colorless to pale yellow

Odour : aromatic

Odour Threshold : No data available

pH : 5-6

Melting point/range : -9 °C

Boiling point/boiling range : 53 °C (0.13 hPa)

Flash point : ca. 63 °C

Method: closed cup

Flammability (solid, gas) : Not applicable

Upper explosion limit / Upper

flammability limit

Upper explosion limit

6.5 %(V)

Lower explosion limit / Lower

flammability limit

Lower explosion limit

0.9 %(V)

Vapour pressure : 0.044 hPa (25 °C)

Relative vapour density : ca. 5.4 (20 °C)

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Relative density : not determined

Density : ca. 1.0619 g/cm3 (20 °C)

Solubility(ies)

Water solubility : 13.9 g/l slightly soluble (25 °C)

Solubility in other solvents : Solvent: organic solvents

Description: completely miscible

Partition coefficient: n-

octanol/water

log Pow: 1.6 (25 °C)

Viscosity

Viscosity, dynamic : ca. 12.5 mPa.s (20 °C)

Viscosity, kinematic : not determined

Explosive properties : Not explosive

In use, may form flammable/explosive vapour-air mixture.

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Organic peroxide

9.2 Other information

Self-Accelerating decomposi-

tion temperature (SADT)

80 °C

Method: UN-Test H.4

SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a

self-accelerating decomposition reaction.

Flammability (liquids) : Flammable liquid, Organic peroxide

Self-heating substances : The substance or mixture is not classified as self heating.

Refractive index : No data available

Self-ignition : The substance or mixture is not classified as pyrophoric.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions. Heating may cause a fire or explosion.

10.2 Chemical stability

Stable under recommended storage conditions.

No decomposition if stored normally.

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Protect from contamination.

Contact with incompatible substances can cause decomposi-

tion at or below SADT. Heat, flames and sparks. Avoid confinement.

10.5 Incompatible materials

Materials to avoid : Accelerators, strong acids and bases, heavy metals and

heavy metal salts, reducing agents

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

Harmful if swallowed or in contact with skin.

Toxic if inhaled.

Product:

Acute oral toxicity : LD50 (Rat): 382 mg/kg

Acute inhalation toxicity : LC50: 1.370 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The component/mixture is toxic after short term

inhalation.

Acute dermal toxicity : LD50: 1,200 - 1,520 mg/kg

Assessment: The component/mixture is moderately toxic after

single contact with skin.

Components:

Cumene hydroperoxide:

Acute oral toxicity : LD50 Oral (Rat): 382 mg/kg

Acute inhalation toxicity : LC50: 1.370 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Assessment: The component/mixture is toxic after short term

inhalation.

Acute dermal toxicity : LD50: 1,200 - 1,520 mg/kg

Assessment: The component/mixture is moderately toxic after

single contact with skin.

Cumene:

Acute oral toxicity : LD50 (Rat): 2,260 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg

Assessment: The substance or mixture has no acute dermal

oxicity

Remarks: No mortality observed at this dose.

Benzenemethanol, alpha, alpha-dimethyl-:

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg

Assessment: The component/mixture is moderately toxic after

single ingestion.

Remarks: Expert judgement

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50: Method: Expert judgement

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on available data, the classification criteria

are not met.

acetophenone:

Acute oral toxicity : Acute toxicity estimate: 500.0 mg/kg

Method: Expert judgement

Assessment: The component/mixture is moderately toxic after

single ingestion.

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

Acute dermal toxicity : LD50 (Rat): 3,300 mg/kg

Method: OECD Test Guideline 402

Skin corrosion/irritation

Causes severe burns.

Product:

Species : Rabbit

Result : Causes burns.

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Remarks : Extremely corrosive and destructive to tissue.

Components:

Cumene hydroperoxide:

Species : Rabbit

Result : Causes burns.

Remarks : Extremely corrosive and destructive to tissue.

Cumene:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Benzenemethanol, alpha, alpha-dimethyl-:

Species : Rabbit

Result : Severe skin irritation

acetophenone:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Species : Rabbit Result : Corrosive

Remarks : May cause irreversible eye damage.

Components:

Cumene hydroperoxide:

Species : Rabbit Result : Corrosive

Remarks : May cause irreversible eye damage.

Cumene:

Species : Rabbit

Method : OECD Test Guideline 405

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Result : No eye irritation

Benzenemethanol, alpha, alpha-dimethyl-:

Result : Irritating to eyes.

acetophenone:

Species : Rabbit

Method : No information available.

Result : Eye irritation

Remarks : Based on harmonised classification in EU regulation

1272/2008, Annex VI

Remarks : May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Product:

Result : Does not cause skin sensitisation.

Remarks : Based on available data, the classification criteria are not met.

Components:

Cumene hydroperoxide:

Result : Does not cause skin sensitisation.

Cumene:

Exposure routes : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

acetophenone:

Test Type : Draize Test Exposure routes : Skin contact Species : Guinea pig

Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Product:

Genotoxicity in vitro : Test Type: in vitro assay

Test system: Salmonella typhimurium

Result: positive

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Skin contact

Result: negative

Components:

Cumene hydroperoxide:

Genotoxicity in vitro : Test Type: in vitro assay

Test system: Salmonella typhimurium

Result: positive

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Application Route: Skin contact

Result: negative

Cumene:

Genotoxicity in vitro : Method: OECD Test Guideline 473

Result: negative

Method: OECD Test Guideline 471

Result: negative

Method: OECD Test Guideline 476

Result: negative

Method: OECD Test Guideline 482

Result: negative

Test Type: Ames test

Result: positive

Genotoxicity in vivo : Species: Rat

Application Route: Intraperitoneal

Exposure time: 72 h

Method: OECD Test Guideline 474

Result: Equivocal

Species: Mouse

Application Route: inhalation (gas)

Exposure time: 14 w

Method: OECD Test Guideline 474

Result: negative

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

acetophenone:

Genotoxicity in vitro : Method: OECD Test Guideline 473

Result: negative

Method: OECD Test Guideline 476

Result: negative

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Species: Mouse

Application Route: Intraperitoneal Method: OECD Test Guideline 474

Result: negative

Carcinogenicity

May cause cancer.

Product:

Remarks : This information is not available.

Components:

Cumene hydroperoxide:

Remarks : This information is not available.

Cumene:

Species : Rat, male and female Application Route : inhalation (vapour) Result : carcinogenic effects

Species : Mouse, male and female

Application Route : inhalation (vapour)
Result : carcinogenic effects

Carcinogenicity - Assess-

ment

Sufficient evidence of carcinogenicity in animal experiments

Reproductive toxicity

Not classified based on available information.

Components:

Cumene hydroperoxide:

Effects on fertility : Remarks: No data available

Effects on foetal develop: : Remarks: No data available

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

ment

Cumene:

Effects on foetal develop-

ment

Species: Rabbit

Application Route: inhalation (vapour) General Toxicity Maternal: LOAEL: 500 Developmental Toxicity: NOAEL: 2,300 Method: OECD Test Guideline 414

acetophenone:

Effects on fertility : Species: Rat

Application Route: Ingestion

General Toxicity - Parent: NOAEL: 225 mg/kg body weight General Toxicity F1: NOAEL: 225 mg/kg body weight

Method: OECD Test Guideline 422

Result: negative

Species: Rat

Application Route: Ingestion

General Toxicity - Parent: LOAEL: 750 mg/kg body weight General Toxicity F1: LOAEL: 750 mg/kg body weight

Method: OECD Test Guideline 422

Effects on foetal develop-

ment

: Species: Mouse

Application Route: Ingestion

General Toxicity Maternal: NOAEL: 125 mg/kg body weight Embryo-foetal toxicity: NOAEL: 125 mg/kg body weight

Method: OECD Test Guideline 414

STOT - single exposure

May cause respiratory irritation.

Components:

Cumene:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Product:

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Components:

Cumene hydroperoxide:

Assessment : May cause damage to organs through prolonged or repeated

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

exposure.

Repeated dose toxicity

Product:

Species : Rat
NOAEC : 31 mg/m³
Application Route : inhalation (gas)

Exposure time : 90 d

Method : OECD Test Guideline 413

Components:

Cumene hydroperoxide:

Species : Rat

NOAEC : 31 mg/m³

Application Route : inhalation (gas)

Exposure time : 90 d

Cumene:

Species : Rat

NOAEL : 154 mg/kg

Application Route : Oral

Method : OECD Test Guideline 413

acetophenone:

Species : Rat

NOAEL : 225 mg/kg

LOAEL : 750 mg/kg

Application Route : Ingestion

Method : OECD Test Guideline 422

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

Based on available data, the classification criteria are not met.

Components:

Cumene:

May be fatal if swallowed and enters airways.

Further information

Product:

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Remarks : Solvents may degrease the skin.

Components:

acetophenone:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3.9 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 18.8 mg/l

Exposure time: 48 h
Test Type: Immobilization

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 3.1 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): 1 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Components:

Cumene hydroperoxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 3.9 mg/l

Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 18.8 mg/l

Exposure time: 48 h
Test Type: Immobilization

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 3.1 mg/l

Exposure time: 72 h

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): 1 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : NOEC (Pseudomonas putida): 50 mg/l

End point: Growth rate Exposure time: 16 h

Cumene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.8 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 2.14 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 2.01 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 : > 2,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 0.35 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Benzenemethanol, alpha, alpha-dimethyl-:

Ecotoxicology Assessment

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

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

acetophenone:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 162 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 528 mg/l

Exposure time: 48 h

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 86.4

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 24.8

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.

Method: OECD Test Guideline 301B

Components:

Cumene hydroperoxide:

Biodegradability : Result: Not readily biodegradable.

Method: OECD Test Guideline 301B

Cumene:

Biodegradability : Result: Readily biodegradable.

Benzenemethanol, alpha, alpha-dimethyl-:

Biodegradability : Remarks: No data available

acetophenone:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential

Components:

Cumene hydroperoxide:

Partition coefficient: n-

octanol/water

: log Pow: 1.6

Cumene:

Bioaccumulation : Bioconcentration factor (BCF): 94.69

Remarks: Calculation

Partition coefficient: n- : log Pow: 3.55 (23 °C)

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

octanol/water

Benzenemethanol, alpha, alpha-dimethyl-:

Partition coefficient: n- : Remarks: No data available

octanol/water

acetophenone:

Bioaccumulation : Bioconcentration factor (BCF): 0.48

Partition coefficient: n-

octanol/water

log Pow: 1.63

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:

Endocrine disrupting poten-

tial

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of wastes in an approved waste disposal facility.

The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Contaminated packaging : Dispose of in accordance with local regulations.

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

Clean container with water.

Dispose of contents/ container to an approved waste disposal

plant.

Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

14.1 UN number

ADR : UN 3109
RID : UN 3109
IMDG : UN 3109
IATA : UN 3109

14.2 UN proper shipping name

ADR : ORGANIC PEROXIDE TYPE F, LIQUID

(CUMYL HYDROPEROXIDE)

RID : ORGANIC PEROXIDE TYPE F, LIQUID

(CUMYL HYDROPEROXIDE)

IMDG : ORGANIC PEROXIDE TYPE F, LIQUID

(CUMYL HYDROPEROXIDE)

IATA : Organic peroxide type F, liquid

(Cumyl hydroperoxide)

14.3 Transport hazard class(es)

ADR : 5.2
RID : 5.2
IMDG : 5.2
IATA : 5.2

14.4 Packing group

ADR

Packing group : Not assigned by regulation

Classification Code : P1
Hazard Identification Number : 539
Labels : 5.2 (8)
Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation

Classification Code : P1

CUROX®CUHP



Version Revision Date: SDS Number: Date of last issue: 07.08.2023 2.1 21.11.2023 600000000424 Date of first issue: 05.10.2022

Hazard Identification Number : 539 Labels 5.2 (8)

IMDG

Not assigned by regulation Packing group

Labels 5.2 (8) EmS Code F-J, S-R

IATA (Cargo)

Packing instruction (cargo 570

aircraft)

Not assigned by regulation Packing group

Organic Peroxides, Keep Away From Heat, Corrosive Labels

IATA (Passenger)

Packing instruction (passen-570

ger aircraft)

Packing group Not assigned by regulation

Organic Peroxides, Keep Away From Heat, Corrosive Labels

14.5 Environmental hazards

ADR

Environmentally hazardous yes

Environmentally hazardous yes

IMDG

Marine pollutant yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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 mix-

Relevant EU provisions transposed through retained EU law

: Conditions of restriction for the fol-UK REACH List of restrictions (Annex 17)

lowing entries should be considered:

Number on list 3

UK REACH Candidate list of substances of very high

concern (SVHC) for Authorisation

: Not applicable

The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Brit-

: Not applicable

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

ain)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

UK REACH List of substances subject to authorisation : Not applicable

(Annex XIV)

GB Export and import of hazardous chemicals - Prior

Informed Consent (PIC) Regulation

Not applicable

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Quantity 1 Quantity 2
H2 ACUTE TOXIC 50 t 200 t

P6b SELF-REACTIVE 50 t 200 t

SUBSTANCES AND

MIXTURES and ORGANIC

PEROXIDES

E2 ENVIRONMENTAL 200 t 500 t

HAZARDS

Other regulations:

Gefahrgruppe nach TRGS 741: lb (German regulatory requirements)

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

TCSI (TW) : On the inventory, or in compliance with the inventory

TSCA (US) : All substances listed as active on the TSCA inventory

AIIC (AU) : On the inventory, or in compliance with the inventory

DSL (CA) : All components of this product are on the Canadian DSL

ENCS (JP) : On the inventory, or in compliance with the inventory

ISHL (JP) : On the inventory, or in compliance with the inventory

KECI (KR) : On the inventory, or in compliance with the inventory

PICCS (PH) : On the inventory, or in compliance with the inventory

IECSC (CN) : On the inventory, or in compliance with the inventory

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

NZIoC (NZ) : On the inventory, or in compliance with the inventory

TECI (TH) : On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Further information

Other information : This safety datasheet only contains information relating to

safety and does not replace any product information or prod-

uct specification.

These safety instructions also apply to empty packaging which

may still contain product residues.

The hazards on the label also apply to residues in the con-

tainer.

Sources of key data used to

compile the Safety Data

Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Full text of other abbreviations

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

2019/1831/EU : Europe. Commission Directive 2019/1831/EU establishing a

fifth list of indicative occupational exposure limit values

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / STEL : Short term exposure limit 2019/1831/EU / TWA : Limit Value - eight hours 2019/1831/EU / STEL : Short term exposure limit

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; GHS - Globally Harmonized System; GLP - Good La-

CUROX®CUHP



 Version
 Revision Date:
 SDS Number:
 Date of last issue: 07.08.2023

 2.1
 21.11.2023
 600000000424
 Date of first issue: 05.10.2022

boratory 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 in Bulk; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; 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

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.

GB / EN