According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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

1.1 Product identifier

Trade name : CUROX[®]I-300

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

Use of the Sub- : Curing chemical

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)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

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

Acute toxicity, Category 4 H302: Harmful if swallowed.

Acute toxicity, Category 4 H332: Harmful if inhaled.

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

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

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Carcinogenicity, Category 2 H351: Suspected of causing cancer.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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 : H226 Flammable liquid and vapour.

H242 Heating may cause a fire.

H302 + H332 Harmful if swallowed or if inhaled. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P234 Keep only in original packaging.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection/ hearing protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do

NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immedi-

ately all contaminated clothing. Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a

POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/ doctor.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX[®]I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish. P391 Collect spillage.

Hazardous components which must be listed on the label:

2-Pentanone, 4-methyl-, peroxide (CAS-No. 37206-20-5)

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated (CAS-No. 93685-81-5)

Isobutyl methyl ketone (CAS-No. 108-10-1)

cyclohexyldimethylamine (CAS-No. 98-94-2)

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

3.2 Mixtures

Chemical nature : Organic Peroxide Liquid mixture

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
2-Pentanone, 4-methyl-, peroxide	37206-20-5 01-2120103792-63- 0000	Flam. Liq. 3; H226 Org. Perox. D; H242 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 45 - < 50
Hydrocarbons, C4, 1,3-butadiene- free, polymerised., triisobutylene fraction, hydrogenated Isobutyl methyl ketone	93685-81-5 236-757-0 01-2119490725-29	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Aquatic Chronic 4; H413 Flam. Liq. 2; H225	>= 40 - < 45
isobatyi metriyi ketone	203-550-1 606-004-00-4 01-2119473980-30	Acute Tox. 4; H332 Eye Irrit. 2; H319 Carc. 2; H351)= 1.0 - < 10

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

		STOT SE 3; H335 (Respiratory system) STOT SE 3; H336 (Central nervous system)	
cyclohexyldimethylamine	98-94-2 202-715-5 01-2119533030-60	Flam. Liq. 3; H226 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 0.25 - < 1

For explanation of abbreviations see section 16.

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.

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

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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. 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. Do NOT induce vomiting.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : sensitising effects

Risks : Harmful if swallowed or if inhaled.

May be fatal if swallowed and enters airways.

May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer.

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

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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

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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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-

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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

SDS Number: Date of last issue: 08.03.2023 Version Revision Date: 04.03.2024 60000000276 Date of first issue: 05.08.2022 2.0

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.

Persons susceptible to skin sensitisation problems or asthma. allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

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.

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. 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 care-

fully resealed and kept upright to prevent leakage.

Advice on common storage

Keep away from combustible materials.

Keep away from strong acids, bases, heavy metal salts and

other reducing substances.

Recommended storage tem- :

perature

< 25 °C

age stability

Further information on stor- : Stable under recommended storage conditions.

7.3 Specific end use(s)

Specific use(s) For further information, refer to the product technical data

sheet.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX[®]I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Isobutyl methyl	108-10-1	STEL	100 ppm	GB EH40
ketone			416 mg/m3	
	Further inform	ation: Can be absor	bed through the skin. The as	signed sub-
	stances are th	nose for which there	are concerns that dermal abs	sorption will
	lead to syster	nic toxicity.		
		TWA	50 ppm	GB EH40
			208 mg/m3	
	Further information: Can be absorbed through the skin. The assigned sub-			
	stances are those for which there are concerns that dermal absorption will			
	lead to systemic toxicity.			
		TWA	20 ppm	2000/39/EC
			83 mg/m3	
	Further information: Indicative			
		STEL	50 ppm	2000/39/EC
			208 mg/m3	
	Further information: Indicative			

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
Isobutyl methyl ketone	108-10-1	4-methylpentan-2-	After shift	GB EH40
		one: 20 micromol		BAT
		per litre		
		(Urine)		

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
2-Pentanone, 4- methyl-, peroxide	Workers	Inhalation	Long-term systemic effects	2.64 mg/m3
	Workers	Inhalation	Acute systemic effects	7.92 mg/m3
	Workers	Dermal	Long-term systemic effects	1.5 mg/kg bw/day
Isobutyl methyl ketone	Workers	Inhalation	Short-term exposure, Systemic effects, Local effects	208 mg/m3
	Workers	Inhalation	Long-term systemic effects, Local effects	83 mg/m3
	Workers	Skin contact	Long-term systemic effects	11.8 mg/kg bw/day
	Consumers	Inhalation	Short-term exposure, Systemic effects,	155.2 mg/m3

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

			Local effects	
	Consumers	Inhalation	Long-term systemic effects, Local effects	14.7 mg/m3
	Consumers	Skin contact	Long-term systemic effects	4.2 mg/kg bw/day
cyclohexyldimethyla- mine	Workers	Inhalation	Long-term systemic effects	0.53 mg/m3
	Workers	Inhalation	Local effects	8.3 mg/m3
	Workers	Skin contact	Long-term systemic effects	0.6 mg/m3

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
2-Pentanone, 4-methyl-, peroxide	Fresh water	0.00133 mg/l
	Marine water	0.00013 mg/l
	Fresh water sediment	0.591 mg/kg dry
		weight (d.w.)
	Marine sediment	0.0591 mg/kg dry
		weight (d.w.)
	Soil	0.118 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	1.28 mg/l
Isobutyl methyl ketone	Fresh water	0.6 mg/l
	Marine water	0.06 mg/l
	Water	1.5 mg/l
	Sewage treatment plant	27.5 mg/l
	Fresh water sediment	8.27 mg/kg dry
		weight (d.w.)
	Marine sediment	0.83 mg/kg dry
		weight (d.w.)
	Soil	1.3 mg/kg dry
		weight (d.w.)
cyclohexyldimethylamine	Fresh water	0.0035 mg/l
	Marine water	0.00035 mg/l
	Intermittent use/release	0.035 mg/l
	Fresh water sediment	0.0369 mg/kg
	Marine water	0.00369 mg/kg
	Soil	0.0053 mg/kg
	Sewage treatment plant	20.6 mg/l

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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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 : 120 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-

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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : characteristic

Odour Threshold : not determined

pH : No data available

Melting point/range : < -25 °C

Boiling point/boiling range : Decomposition: Decomposes below the boiling point.

Flash point : 40 °C

Method: ISO 3679, closed cup

Flammability (solid, gas) : Not applicable

Upper explosion limit / Upper

flammability limit

Upper explosion limit

4 %(V)

(for a component of this mixture)

Lower explosion limit / Lower

flammability limit

Lower explosion limit

0.5 %(V)

(for a component of this mixture)

Vapour pressure : 1 hPa (20 °C)

(for a component of this mixture)

Relative vapour density : not determined

Relative density : not determined

Density : 0.89 g/cm3 (20 °C)

Solubility(ies)

Water solubility : practically insoluble

Solubility in other solvents : Solvent: Alcohol

Description: completely miscible

Solvent: Phthalates

Description: completely miscible

Partition coefficient: n-

octanol/water

: Not applicable

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Auto-ignition temperature : not determined

Viscosity

Viscosity, dynamic : 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)

50 °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 and vapour., Organic peroxide

Self-heating substances : Not applicable

The substance or mixture is not classified as self heating.

Refractive index : 1.43 at 20 °C

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.

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

10.4 Conditions to avoid

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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 if inhaled.

Product:

Acute oral toxicity : LD50 (Rat): 1,575 mg/kg

Method: OECD Test Guideline 401

Remarks: Information given is based on tests on the mixture

itself.

Acute inhalation toxicity : LC50 (Rat): 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The component/mixture is moderately toxic after

short term inhalation.

Remarks: Information given is based on tests on the mixture

itself.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: No mortality observed at this dose.

Information given is based on tests on the mixture itself.

Components:

2-Pentanone, 4-methyl-, peroxide:

Acute oral toxicity : LD50 (Rat): 1,575 mg/kg

Method: OECD Test Guideline 401

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Acute inhalation toxicity : LC50 (Rat): 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The component/mixture is moderately toxic after

short term inhalation.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: No mortality observed at this dose.

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: Based on data from similar materials

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 mg/kg

Method: OECD Test Guideline 402

Isobutyl methyl ketone:

Acute oral toxicity : LD50 (Rat): 2,080 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 11 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: No mortality observed at this dose.

cyclohexyldimethylamine:

Acute oral toxicity : LD50 (Rat): 272 - 289 mg/kg

Assessment: The component/mixture is toxic after single in-

gestion.

Acute inhalation toxicity : LC50 (Rat): > 1.7 - 5.8 mg/l

Exposure time: 6 h
Test atmosphere: vapour

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Method: OECD Test Guideline 403

Assessment: The component/mixture is toxic after short term

inhalation.

Acute dermal toxicity : LD50 (Rat): 380 mg/kg

Method: OECD Test Guideline 402

Assessment: The component/mixture is toxic after single con-

tact with skin.

Skin corrosion/irritation

Causes severe burns.

Product:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive after 1 to 4 hours of exposure

Remarks : Information given is based on tests on the mixture itself.

Remarks : Extremely corrosive and destructive to tissue.

Components:

2-Pentanone, 4-methyl-, peroxide:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Corrosive after 1 to 4 hours of exposure

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Result : Repeated exposure may cause skin dryness or cracking.

Isobutyl methyl ketone:

Species : Rabbit Exposure time : 72 h

Method : OECD Test Guideline 404

Result : No skin irritation

Result : Repeated exposure may cause skin dryness or cracking.

cyclohexyldimethylamine:

Result : Causes burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Species : Rabbit

Method : OECD Test Guideline 405

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Result : Risk of serious damage to eyes.

Remarks : Information given is based on tests on the mixture itself.

Remarks : May cause irreversible eye damage.

Components:

2-Pentanone, 4-methyl-, peroxide:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Risk of serious damage to eyes.

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Result : No eye irritation

Isobutyl methyl ketone:

Species : Rabbit

Method : OECD Test Guideline 405

Result : Mild eye irritation

cyclohexyldimethylamine:

Result : Corrosive

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified due to lack of data.

Product:

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

Method : OECD Test Guideline 406

Result : May cause sensitisation by skin contact.

Remarks : Information given is based on tests on the mixture itself.

Remarks : Causes sensitisation.

Components:

2-Pentanone, 4-methyl-, peroxide:

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

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

Version SDS Number: Date of last issue: 08.03.2023 Revision Date: 2.0 04.03.2024 60000000276 Date of first issue: 05.08.2022

OECD Test Guideline 406 Method

Result May cause sensitisation by skin contact.

Isobutyl methyl ketone:

Test Type Maximisation Test

Species Guinea pig

Method OECD Test Guideline 406

Result Does not cause skin sensitisation.

cyclohexyldimethylamine:

Test Type Local lymph node assay (LLNA)

Species Mouse

Method OECD Test Guideline 429

Result Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified due to lack of data.

Product:

Genotoxicity in vitro Test Type: Bacterial reverse mutation assay (AMES)

> Test system: Salmonella typhimurium Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes Method: OECD Test Guideline 473

Result: positive

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Method: OECD Test Guideline 476

Result: negative

Test Type: Micronucleus test Genotoxicity in vivo

> Species: Mouse Cell type: Bone marrow Application Route: Oral

Method: OECD Test Guideline 474

Result: negative GLP: yes

Components:

2-Pentanone, 4-methyl-, peroxide:

Genotoxicity in vitro Test Type: Bacterial reverse mutation assay (AMES)

> Test system: Salmonella typhimurium Method: OECD Test Guideline 471

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

Version SDS Number: Date of last issue: 08.03.2023 Revision Date: 2.0 04.03.2024 60000000276 Date of first issue: 05.08.2022

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Human lymphocytes Method: OECD Test Guideline 473

Result: positive

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo Test Type: Micronucleus test

> Species: Mouse Cell type: Bone marrow Application Route: Oral

Method: OECD Test Guideline 474

Result: negative GLP: yes

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Germ cell mutagenicity- As-

sessment

: No known effect.

Isobutyl methyl ketone:

Genotoxicity in vitro Method: OECD Test Guideline 473

Result: negative

Method: OECD Test Guideline 476

Result: Equivocal

Method: OECD Test Guideline 471

Result: negative

Species: Mouse Genotoxicity in vivo

> Application Route: Intraperitoneal Method: OECD Test Guideline 474

Result: negative

cyclohexyldimethylamine:

Germ cell mutagenicity- As-

sessment

Animal testing did not show any mutagenic effects.

Carcinogenicity

Suspected of causing cancer.

Product:

This information is not available. Remarks

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Components:

2-Pentanone, 4-methyl-, peroxide:

Remarks : This information is not available.

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Carcinogenicity - Assess-

ment

: No known effect.

Isobutyl methyl ketone:

Species : Mouse

Application Route : inhalation (vapour)

Exposure time : 2 Years NOAEL : 1.84 mg/l

Method : OECD Test Guideline 451
Result : Suspected of causing cancer.

Target Organs : Liver

Species : Rat

Application Route : inhalation (vapour)

Exposure time : 2 Years NOAEL : 1.84 mg/l

Method : OECD Test Guideline 453
Result : Suspected of causing cancer.

Target Organs : Kidney

Carcinogenicity - Assess-

ment

Limited evidence of carcinogenicity in animal studies

cyclohexyldimethylamine:

Carcinogenicity - Assess-

ment

Carcinogenicity classification not possible from current data.

Reproductive toxicity

Not classified due to lack of data.

Product:

Effects on fertility : Species: Rat, male and female

Application Route: Oral

General Toxicity - Parent: NOAEL: 200 mg/kg body weight General Toxicity F1: NOAEL: 600 mg/kg body weight

Fertility: NOAEL: 600 mg/kg body weight Method: OECD Test Guideline 422

Remarks: Based on data from similar materials

Effects on foetal develop: Test Type: Pre-natal

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

ment Species: Rat, females

Application Route: Oral

General Toxicity Maternal: NOAEL: 65 mg/kg body weight Developmental Toxicity: NOAEL: 200 mg/kg body weight

Method: OECD Test Guideline 414

GLP: yes

Remarks: Based on data from similar materials

Components:

2-Pentanone, 4-methyl-, peroxide:

Effects on fertility : Species: Rat, male and female

Application Route: Oral

General Toxicity - Parent: NOAEL: 200 mg/kg body weight General Toxicity F1: NOAEL: 600 mg/kg body weight

Fertility: NOAEL: 600 mg/kg body weight Method: OECD Test Guideline 422

Remarks: Based on data from similar materials

Effects on foetal develop-

ment

Test Type: Pre-natal

Species: Rat, females Application Route: Oral

General Toxicity Maternal: NOAEL: 65 mg/kg body weight Developmental Toxicity: NOAEL: 200 mg/kg body weight

Method: OECD Test Guideline 414

GLP: ves

Remarks: Based on data from similar materials

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Reproductive toxicity - As- : No known effect.

sessment

Isobutyl methyl ketone:

Effects on fertility : Test Type: Multi-generation study

Species: Rat

Application Route: inhalation (vapour)
General Toxicity - Parent: NOAEL: 4.1 mg/l
General Toxicity F1: NOAEL: 4.1 mg/l

Fertility: NOAEL: 8.1 mg/l

Method: OECD Test Guideline 416

Effects on foetal develop-

ment

Species: Rat

Application Route: Inhalation

General Toxicity Maternal: NOEC: 4.1 ppm

Teratogenicity: NOEC: 4.1 ppm Method: OECD Test Guideline 414 Result: No teratogenic effects

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

cyclohexyldimethylamine:

Reproductive toxicity - As-

sessment

Animal testing did not show any effects on fertility.

Did not show teratogenic effects in animal experiments.

STOT - single exposure

Not classified due to lack of data.

Components:

Isobutyl methyl ketone:

Target Organs : Central nervous system

Assessment : May cause drowsiness or dizziness.

Assessment : May cause respiratory irritation.

cyclohexyldimethylamine:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT - repeated exposure

Not classified due to lack of data.

Components:

Isobutyl methyl ketone:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

cyclohexyldimethylamine:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

2-Pentanone, 4-methyl-, peroxide:

Species : Rat, male and female NOAEL : 150 mg/kg bw/day

Exposure time : 90d

Method : OECD Test Guideline 408

GLP : ves

Remarks : Based on data from similar materials

Isobutyl methyl ketone:

Species : Rat

50 mg/kg

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

NOAEL : 250 mg/kg LOAEL : 1,000 mg/kg Application Route : oral (gavage)

Exposure time : 13 w

Method : OECD Test Guideline 408

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

May be fatal if swallowed and enters airways.

Components:

2-Pentanone, 4-methyl-, peroxide:

May be fatal if swallowed and enters airways.

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

May be fatal if swallowed and enters airways.

Isobutyl methyl ketone:

Not classified due to data which are conclusive although insufficient for classification.

cyclohexyldimethylamine:

Not classified due to data which are conclusive although insufficient for classification.

Further information

Product:

Remarks : Solvents may degrease the skin.

Components:

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Remarks : May cause headache and dizziness.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 1.89 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Information given is based on tests on the mixture

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

itself.

NOEC (Danio rerio (zebra fish)): 1.38 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Information given is based on tests on the mixture

itself.

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): 4.48 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Information given is based on tests on the mixture

itself.

NOEC (Daphnia magna (Water flea)): 2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Information given is based on tests on the mixture

itself.

Toxicity to algae/aquatic

plants

EC50 (Raphidocelis subcapitata (freshwater green alga)):

1.33 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Information given is based on tests on the mixture

itself.

NOEC (Raphidocelis subcapitata (freshwater green alga)):

0.94 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Information given is based on tests on the mixture

itself.

Toxicity to microorganisms : EC10 (Bacteria): 12.8 mg/l

Test Type: Respiration inhibition of activated sludge

Method: OECD Test Guideline 209

Remarks: Information given is based on tests on the mixture

itself.

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

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

Components:

2-Pentanone, 4-methyl-, peroxide:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 1.89 mg/l

Exposure time: 96 h

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Method: OECD Test Guideline 203

NOEC (Danio rerio (zebra fish)): 1.38 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): 4.48 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

NOEC (Daphnia magna (Water flea)): 2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Raphidocelis subcapitata (freshwater green alga)):

1.33 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Raphidocelis subcapitata (freshwater green alga)):

0.94 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : EC10 (Bacteria): 12.8 mg/l

Test Type: Respiration inhibition of activated sludge

Method: OECD Test Guideline 209

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): > 0.04 mg/l

Exposure time: 48 h

Remarks: Information given is based on data obtained from

similar substances.

Toxicity to algae/aquatic

plants

IC50 (algae): > 0.04 mg/l

Exposure time: 72 h

Remarks: Information given is based on data obtained from

similar substances.

Ecotoxicology Assessment

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

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

Isobutyl methyl ketone:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 179 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 200 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

ErC50 (Lemna gibba (gibbous duckweed)): > 146 mg/l

End point: Growth rate

Method: OECD Test Guideline 221

EC10 (Lemna gibba (gibbous duckweed)): > 146 mg/l

Method: OECD Test Guideline 221

Toxicity to microorganisms : EC50 (Pseudomonas putida): > 275 mg/l

Exposure time: 16 h Method: DIN 38 412 Part 8

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC: 30 - 35 mg/l Exposure time: 21 d

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

cyclohexyldimethylamine:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 31.58 mg/l

Exposure time: 96 h Test Type: static test Method: DIN 38412

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): 75 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 3.5

mg/l

Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

EC10 (Pseudokirchneriella subcapitata (green algae)): 0.6

mg/l

Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC10 (Pseudomonas putida): 137 mg/l

Exposure time: 17 h

12.2 Persistence and degradability

Product:

Biodegradability : Result: Readily biodegradable.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Method: OECD Test Guideline 301D

Remarks: Information given is based on data on the compo-

nents and the ecotoxicology of similar products.

Components:

2-Pentanone, 4-methyl-, peroxide:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301D

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Biodegradability : Result: Not readily biodegradable.

Isobutyl methyl ketone:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 83 % Exposure time: 28 d

Method: OECD Test Guideline 301F

cyclohexyldimethylamine:

Biodegradability : Result: Readily biodegradable.

12.3 Bioaccumulative potential

Components:

2-Pentanone, 4-methyl-, peroxide:

Partition coefficient: n- : log Pow: 4.2 (20 °C)

octanol/water Method: OECD Test Guideline 117

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:

Partition coefficient: n- : log Pow: 5.94 - 6.16 (20 °C)

octanol/water Remarks: The value is calculated

Isobutyl methyl ketone:

Partition coefficient: n-

octanol/water

log Pow: 1.9

cyclohexyldimethylamine:

Bioaccumulation : Bioconcentration factor (BCF): 35.66

Remarks: Calculation

12.4 Mobility in soil

No data available

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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.

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 3105 **RID** : UN 3105

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

IMDG : UN 3105
IATA : UN 3105

14.2 UN proper shipping name

ADR : ORGANIC PEROXIDE TYPE D, LIQUID

(METHYL ISOBUTYL KETONE PEROXIDE(S))

RID : ORGANIC PEROXIDE TYPE D, LIQUID

(METHYL ISOBUTYL KETONE PEROXIDE(S))

IMDG : ORGANIC PEROXIDE TYPE D, LIQUID

(METHYL ISOBUTYL KETONE PEROXIDE(S))

IATA : Organic peroxide type D, liquid

(Methyl isobutyl ketone peroxide(s))

14.3 Transport hazard class(es)

Class Subsidiary risks

ADR : 5.2 RID : 5.2 IMDG : 5.2

IATA : 5.2 HEAT

14.4 Packing group

ADR

Packing group : Not assigned by regulation

Classification Code : P1 Labels : 5.2 Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation

Classification Code : P1
Hazard Identification Number : 539
Labels : 5.2

IMDG

Packing group : Not assigned by regulation

Labels : 5.2 EmS Code : F-J, S-R

IATA (Cargo)

Packing instruction (cargo : 570

aircraft)

Packing group : Not assigned by regulation

Labels : Organic Peroxides, Keep Away From Heat

IATA (Passenger)

Packing instruction (passen-

ger aircraft)

570

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Packing group : Not assigned by regulation

Labels : Organic Peroxides, Keep Away From Heat

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

rid

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 mixture

Relevant EU provisions transposed through retained EU law

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

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-

ain)

Not applicable

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

plete the ozone layer

: Not applicable

UK REACH List of substances subject to authorisation

(Annex XIV)

Not applicable

(ATTICK MV)

GB Export and import of hazardous chemicals - Prior

Informed Consent (PIC) Regulation

Not applicable

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Control of Major Accident Hazards Regulations P6b SELF-REACTIVE SUBSTANCES

2015 (COMAH) AND MIXTURES and ORGANIC

PEROXIDES

E2 ENVIRONMENTAL HAZARDS

Other regulations:

Gefahrgruppe nach TRGS 741: lb (German regulatory requirements)

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

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

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

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

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

IECSC (CN) : 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

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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

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/

Classification of the mixture:

Classification procedure:

Flam. Liq. 3	H226	Based on product data or assessment
Org. Perox. D	H242	Based on product data or assessment
Acute Tox. 4	H302	Based on product data or assessment
Acute Tox. 4	H332	Based on product data or assessment
Skin Corr. 1C	H314	Based on product data or assessment
Eye Dam. 1	H318	Based on product data or assessment
Skin Sens. 1	H317	Based on product data or assessment
Carc. 2	H351	Calculation method
Asp. Tox. 1	H304	Based on product data or assessment
Aquatic Chronic 2	H411	Based on product data or assessment

Full text of H-Statements

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H242 Heating may cause a fire. H301 Toxic if swallowed. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.

H331 : Toxic if inhaled. H332 : Harmful if inhaled.

H335 : May cause respiratory irritation.
H336 : May cause drowsiness or dizziness.
H351 : Suspected of causing cancer.

H411 : Toxic to aquatic life with long lasting effects.
 H412 : Harmful to aquatic life with long lasting effects.
 H413 : May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Asp. Tox. : Aspiration hazard
Carc. : Carcinogenicity
Eye Dam. : Serious eye damage

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Org. Perox. : Organic peroxides
Skin Corr. : Skin corrosion
Skin Sens. : Skin sensitisation

STOT SE : Specific target organ toxicity - single exposure

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

list of indicative occupational exposure limit values

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 BAT : UK. Biological monitoring guidance values

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / 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 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 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 guid-

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



CUROX®I-300

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 08.03.2023

 2.0
 04.03.2024
 600000000276
 Date of first issue: 05.08.2022

ance 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