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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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

1.1 Product identifier

Trade name : CUROX®M-402

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

Use of the Sub- : Hardener

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 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 1B H314: Causes severe skin burns and eye damage.

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

Reproductive toxicity, Category 2 H361: Suspected of damaging fertility or the un-

born child.

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

H335: May cause respiratory irritation.

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



# CUROX®M-402

Version Revision Date: SDS Number: Date of last issue: 08.03.2023 Date of first issue: 08.03.2023 1.1 03.01.2025 60000000263

Long-term (chronic) aquatic hazard, Category 3

H412: Harmful to aquatic life with long lasting ef-

#### 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 + H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

May cause respiratory irritation. H335

Suspected of damaging fertility or the unborn H361

H412 Harmful 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.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection/ hearing protection.

Response:

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. Immedi-

ately 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 rins-

ing. Immediately call a POISON CENTER/ doctor.

P370 + P378 In case of fire: Use water spray, alcoholresistant foam, dry chemical or carbon dioxide to

extinguish.

Hazardous components which must be listed on the label:

Diacetone alcohol (CAS-No. 123-42-2)

2-Butanone, peroxide (CAS-No. 1338-23-4)

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

#### 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)
Diacetone alcohol	123-42-2 204-626-7 603-016-00-1 01-2119473975-21	Eye Irrit. 2; H319 Repr. 2; H361 STOT SE 3; H335 (Respiratory system) ————————————————————————————————————	>= 35 - < 40
2-Butanone, peroxide	1338-23-4 700-954-4 01-2119514691-43- 0000	Org. Perox. D; H242 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1B; H314 Eye Dam. 1; H318	>= 25 - < 30
Trimethylpentanediol isobutyrate	6846-50-0 229-934-9 01-2119451093-47	Repr. 2; H361 Aquatic Chronic 3; H412	>= 20 - < 25
hydrogen peroxide	7722-84-1 231-765-0 008-003-00-9 01-2119485845-22	Ox. Liq. 1; H271 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system) Aquatic Chronic 3; H412	>= 3 - < 5

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



# CUROX®M-402

Version	Revision Date:	SDS Number:	Date of last issue: 08.03.2023
1.1	03.01.2025	600000000263	Date of first issue: 08.03.2023

		specific concentration limit Ox. Liq. 1; H271 >= 70 % Ox. Liq. 2; H272 50 - < 70 % Skin Corr. 1A; H314 >= 70 % Skin Corr. 1B; H314 50 - < 70 % Skin Irrit. 2; H315 35 - < 50 % Eye Dam. 1; H318 8 - < 50 % Eye Irrit. 2; H319 5 - < 8 % STOT SE 3; H335 >= 35 % Aquatic Chronic 3; H412 >= 63 %	
Butanone	78-93-3 201-159-0 606-002-00-3	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system)	>= 1 - < 5

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.

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

and use the recommended protective clothing

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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 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.

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

Risks : Harmful if swallowed or if inhaled.

Causes serious eye damage. May cause respiratory irritation.

Suspected of damaging fertility or the unborn child.

Causes severe burns.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

#### **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

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.

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

#### **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. Remove all sources of ignition.

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.

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



# CUROX®M-402

Version SDS Number: Date of last issue: 08.03.2023 Revision Date: 1.1 03.01.2025 60000000263 Date of first issue: 08.03.2023

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.

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 carefully resealed and kept upright to prevent leakage.

Keep away from combustible materials.

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

other reducing substances.

Recommended storage tem-

Advice on common storage

perature

< 30 °C

Further information on stor-

age stability

: Stable under recommended storage conditions.

#### 7.3 Specific end use(s)

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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 of exposure)	Control parameters	Basis
Diacetone alcohol	123-42-2	TWA	50 ppm 241 mg/m3	GB EH40
		STEL	75 ppm 362 mg/m3	GB EH40
2-Butanone, peroxide	1338-23-4	STEL	0.2 ppm 1.5 mg/m3	GB EH40
hydrogen peroxide	7722-84-1	TWA	1 ppm 1.4 mg/m3	GB EH40
		STEL	2 ppm 2.8 mg/m3	GB EH40
Butanone	78-93-3	TWA	200 ppm 600 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned sub-			
	stances are th	nose for which there	are concerns that dermal abs	sorption will
	lead to systen	nic toxicity.		
		STEL	300 ppm 899 mg/m3	GB EH40
	Further inform	nation: 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 systen	nic toxicity.		
		STEL	300 ppm	2000/39/EC
			900 mg/m3	
	Further inform	nation: Indicative		
		TWA	200 ppm	2000/39/EC
			600 mg/m3	
	Further inform	nation: Indicative		

# **Biological occupational exposure limits**

Substance name	CAS-No.	Control parameters	Sampling time	Basis
Butanone	78-93-3	butan-2-one: 70 micromol per litre (Urine)	After shift	GB EH40 BAT

### **Derived No Effect Level (DNEL):**

Substance name	End Use	Exposure routes	Potential health ef-	Value
			fects	
Diacetone alcohol	Workers	Inhalation	Acute local effects	240 mg/m3
	Workers	Skin contact	Long-term systemic	9.4 mg/kg

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

			effects	bw/day
	Workers	Inhalation	Long-term systemic effects	66.4 mg/m3
	Workers	Inhalation	Long-term local ef- fects	66.4 mg/m3
2-Butanone, peroxide	Workers	Inhalation	Long-term systemic effects	2.35 mg/m3
	Workers	Skin contact	Long-term systemic effects	1.33 mg/kg bw/day
	Workers	Inhalation	Acute systemic effects	7.05 mg/m3
Trimethylpentanediol isobutyrate	Workers	Inhalation	Long-term systemic effects	17.62 mg/m3
	Workers	Skin contact	Long-term local ef- fects	5 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	4.35 mg/m3
	Consumers	Skin contact	Long-term systemic effects	5 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	5 mg/kg bw/day
Butanone	Workers	Skin contact	Long-term systemic effects	1161 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	600 mg/m3

### **Predicted No Effect Concentration (PNEC):**

Substance name	Environmental Compartment	Value
Diacetone alcohol	Fresh water	2 mg/l
	Marine water	0.2 mg/l
	Sewage treatment plant	82 mg/l
	Fresh water sediment	9.06 mg/kg dry
		weight (d.w.)
	Marine sediment	0.91 mg/kg dry
		weight (d.w.)
	Soil	0.63 mg/kg dry
		weight (d.w.)
2-Butanone, peroxide	Fresh water	0.0056 mg/l
	Marine water	0.00056 mg/l
	Intermittent use/release	0.056 mg/l
	Sewage treatment plant	1.2 mg/l
	Fresh water sediment	0.0876 mg/kg
	Marine sediment	0.00876 mg/kg
	Soil	0.0142 mg/kg
Trimethylpentanediol isobutyrate	Fresh water	0.014 mg/l
	Marine water	0.001 mg/l
	Fresh water sediment	5.29 mg/kg dry
		weight (d.w.)
	Marine sediment	0.529 mg/kg dry
		weight (d.w.)

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

	Soil	1.05 mg/kg dry weight (d.w.)
	Sewage treatment plant	3 mg/l
Butanone	Fresh water	55.8 mg/l
	Marine water	55.8 mg/l
	Intermittent use/release	55.8 mg/l
	Sewage treatment plant	709 mg/l
	Fresh water sediment	284.7 mg/kg dry weight (d.w.)
	Soil	22.5 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 : 480 min
Glove thickness : 0.47 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.

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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

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 : colourless

Odour : characteristic

Odour Threshold : not determined

pH : No data available substance/mixture is non-soluble (in water)

Melting point/ range : < -25 °C

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

Flash point : 72 °C

Method: ISO 3679, closed cup

Flammability (solid, gas) : Not applicable

Upper explosion limit / Upper

flammability limit

Upper explosion limit

6.9 %(V)

1.8 %(V)

(for a component of this mixture)

Lower explosion limit / Lower

flammability limit

Lower explosion limit

(for a component of this mixture)

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

Vapour pressure : 1.29 hPa (20 °C)

(for a component of this mixture)

Relative vapour density : not determined

Relative density : not determined

Density : 1.04 g/cm3 (20 °C)

Solubility(ies)

Water solubility : practically insoluble

Solubility in other solvents : Solvent: Phthalates

Description: completely miscible

Partition coefficient: n-

octanol/water

Not applicable

Auto-ignition temperature : not determined

Viscosity

Viscosity, dynamic : ca. 22 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)

60 °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 : Not applicable

The substance or mixture is not classified as self heating.

Refractive index : 1.434 at 20 °C

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

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

#### **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

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 : Acute toxicity estimate: 1,447 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 4.44 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

**Components:** 

Diacetone alcohol:

Acute oral toxicity : LD50 (Rat): 3,002 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat, male and female): >= 7.6 mg/l

Exposure time: 4 h Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD0 (Rat): > 1,875 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: No mortality observed at this dose.

2-Butanone, peroxide:

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

Method: Expert judgement

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Expert judgement

Assessment: The component/mixture is moderately toxic after

short term inhalation.

Remarks: Based on data from similar materials

Acute dermal toxicity : Acute toxicity estimate: 2,500 mg/kg

Method: Expert judgement

Trimethylpentanediol isobutyrate:

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

Method: Expert judgement

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

icity

Acute inhalation toxicity : LCLo (Rat): > 0.12 mg/l

Exposure time: 6 h
Test atmosphere: vapour
Method: Expert judgement

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: No mortality observed at this dose.

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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

Method: Expert judgement

Assessment: The substance or mixture has no acute dermal

toxicity

hydrogen peroxide:

Acute oral toxicity : LD50 (Rat, male and female): 431 mg/kg

Method: Expert judgement

Assessment: The component/mixture is moderately toxic after

single ingestion.

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The component/mixture is moderately toxic after

short term inhalation.

Remarks: Based on harmonised classification in EU regulation

1272/2008, Annex VI

Acute dermal toxicity : LD50 (Rabbit): 9,200 mg/kg

Remarks: No adverse effect has been observed in acute tox-

icity tests.

**Butanone:** 

Acute oral toxicity : LD50 (Rat): 2,193 mg/kg

Method: OECD Test Guideline 423

Acute inhalation toxicity : Remarks: No data available

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

Method: OECD Test Guideline 402

Remarks: Based on available data, the classification criteria

are not met.

Skin corrosion/irritation

Causes severe burns.

**Product:** 

Remarks : Extremely corrosive and destructive to tissue.

**Components:** 

Diacetone alcohol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

2-Butanone, peroxide:

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

Species : Rabbit

Result : Causes burns.

Trimethylpentanediol isobutyrate:

Species : Guinea pig

Exposure time : 24 h

Result : No skin irritation

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

hydrogen peroxide:

Result : Corrosive after 3 minutes or less of exposure

**Butanone:** 

Species : Rabbit

Assessment : Repeated exposure may cause skin dryness or cracking.

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

**Product:** 

Remarks : May cause irreversible eye damage.

**Components:** 

Diacetone alcohol:

Species : Rabbit

Method : OECD Test Guideline 405

Result : Irritation to eyes, reversing within 21 days

2-Butanone, peroxide:

Result : Irreversible effects on the eye

Trimethylpentanediol isobutyrate:

Species : Rabbit Exposure time : 24 h

Result : No eye irritation

hydrogen peroxide:

Result : Irreversible effects on the eye Remarks : hydrogen peroxide, 35%

**Butanone:** 

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

Species : Rabbit

Method : OECD Test Guideline 405

Result : Eye irritation

#### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified due to lack of data.

#### Respiratory sensitisation

Not classified due to lack of data.

#### **Components:**

### Diacetone alcohol:

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

#### 2-Butanone, peroxide:

Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Assessment : Harmful if swallowed., Harmful if inhaled.

#### Trimethylpentanediol isobutyrate:

Species : Guinea pig

Result : Does not cause skin sensitisation.

#### **Butanone:**

Exposure routes : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

### Germ cell mutagenicity

Not classified due to lack of data.

#### Components:

#### Diacetone alcohol:

Genotoxicity in vitro : Method: OECD Test Guideline 476

Result: negative

Method: OECD Test Guideline 471

Result: negative

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

Method: OECD Test Guideline 473

Result: negative

Genotoxicity in vivo : Remarks: Not classified due to data which are conclusive

although insufficient for classification.

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

2-Butanone, peroxide:

Genotoxicity in vitro : Method: OECD Test Guideline 473

Result: negative

Method: OECD Test Guideline 471

Result: negative

Method: OECD Test Guideline 476

Result: negative

Trimethylpentanediol isobutyrate:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Test Type: Ames test

Method: Regulation (EC) No. 440/2008, Annex, B.13/14

(Ames test) Result: negative

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

hydrogen peroxide:

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

Result: negative

positive

Remarks: Information taken from reference works and the

literature.

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: positive

Remarks: Information taken from reference works and the

literature.

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay)

Species: Mouse (male and female)

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

Method: OECD Test Guideline 474

Result: negative

Remarks: hydrogen peroxide, 35%

Germ cell mutagenicity- As-

sessment

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

**Butanone:** 

Genotoxicity in vitro : Method: OECD Test Guideline 471

Result: negative

Method: OECD Test Guideline 476

Result: negative

Method: OECD Test Guideline 473

Result: negative

Genotoxicity in vivo : Species: Mouse

Application Route: Intraperitoneal Method: OECD Test Guideline 474

Result: negative

Carcinogenicity

Not classified due to lack of data.

**Components:** 

Diacetone alcohol:

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

2-Butanone, peroxide:

Remarks : This information is not available.

hydrogen peroxide:

Carcinogenicity - Assess-

ment

Carcinogenicity classification not possible from current data.

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Components:

Diacetone alcohol:

Effects on fertility : Species: Rat

Application Route: oral (gavage)

General Toxicity - Parent: NOAEL: 300 mg/kg body weight General Toxicity F1: NOAEL: 300 mg/kg body weight

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

Method: OECD Test Guideline 422

Effects on foetal develop-

ment

Species: Rat

Application Route: inhalation (vapour)
General Toxicity Maternal: NOAEL: 4.106
Embryo-foetal toxicity: NOAEL: 12,292
Method: OECD Test Guideline 414

Reproductive toxicity - As-

sessment

Some evidence of adverse effects on sexual function and

fertility, and/or on development, based on animal experiments.

2-Butanone, peroxide:

Effects on fertility : Species: Rat

Application Route: oral (gavage)

General Toxicity - Parent: NOAEL: 50 mg/kg body weight

Method: OECD Test Guideline 421

Result: negative

Trimethylpentanediol isobutyrate:

Effects on foetal develop-

ment

Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion
Method: OECD Test Guideline 414

Result: negative

Reproductive toxicity - As-

sessment

Suspected of damaging fertility or the unborn child., Some evidence of adverse effects on sexual function and fertility,

and/or on development, based on animal experiments.

hydrogen peroxide:

Reproductive toxicity - As-

sessment

No data available

**Butanone:** 

Effects on fertility : Species: Rat

Application Route: oral (drinking water)
General Toxicity - Parent: NOAEL: 10,000 mg/l
General Toxicity F1: NOAEL: 10,000 mg/l
Method: OECD Test Guideline 416

Remarks: Based on data from similar materials

Species: Rat

Application Route: oral (drinking water)

General Toxicity - Parent: LOAEL: 20,000 mg/l

Method: OECD Test Guideline 416

Remarks: Based on data from similar materials

Effects on foetal develop: : Species: Rat

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

ment Application Route: Inhalation

General Toxicity Maternal: NOAEC: ca. 1,002 mg/kg body

weight

Teratogenicity: NOAEC Parent: ca. 1,002 mg/kg body weight

Method: OECD Test Guideline 414

Result: negative

### STOT - single exposure

May cause respiratory irritation.

#### **Components:**

#### Diacetone alcohol:

Target Organs : Respiratory system

Assessment : May cause respiratory irritation.

#### hydrogen peroxide:

Target Organs : Respiratory Tract

Assessment : May cause respiratory irritation.

### **Butanone:**

Assessment : May cause drowsiness or dizziness.

#### STOT - repeated exposure

Not classified due to lack of data.

### **Components:**

### hydrogen peroxide:

Remarks : No data available

#### Repeated dose toxicity

### **Components:**

#### Diacetone alcohol:

 Species
 : Rat

 NOAEL
 : 1.04 mg/l

 LOAEL
 : 4.685 mg/l

Application Route : inhalation (vapour)

Exposure time : 6 w

Method : OECD Test Guideline 412

Species : Rat
NOAEL : 100 mg/kg
Application Route : oral (gavage)

Method : OECD Test Guideline 422

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

2-Butanone, peroxide:

Species : Rat NOAEL : 200

NOAEL : 200 mg/kg Application Route : oral (gavage)

Exposure time : 28 d

Method : OECD Test Guideline 407

hydrogen peroxide:

Species : Mouse, female NOAEL : 37 mg/kg

Application Route : oral (drinking water)

Exposure time : 90 d

Remarks : hydrogen peroxide, 35%

Species : Mouse, males NOAEL : 26 mg/kg

Application Route : oral (drinking water)

Exposure time : 90

Remarks : hydrogen peroxide, 35%

### **Aspiration toxicity**

Not classified due to lack of data.

#### **Components:**

#### Trimethylpentanediol isobutyrate:

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

### hydrogen peroxide:

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

### **Further information**

**Product:** 

Remarks : No data available

#### **Components:**

### Trimethylpentanediol isobutyrate:

Remarks : No data available

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

#### **SECTION 12: Ecological information**

### 12.1 Toxicity

### Components:

Diacetone alcohol:

Toxicity to fish : LC50 (Oryzias latipes (Orange-red killifish)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EbC50 (Pseudokirchneriella subcapitata (green algae)): >

1,000 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 1,000

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

2-Butanone, peroxide:

Toxicity to fish : LC50 (Poecilia reticulata (guppy)): 44.2 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

NOEC (Poecilia reticulata (guppy)): 18 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 39 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

NOEC (Daphnia magna (Water flea)): 26.7 mg/l

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 5.6

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 2.1

mg/l

Exposure time: 72 h

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



# CUROX®M-402

Version **Revision Date:** SDS Number: Date of last issue: 08.03.2023 1.1 03.01.2025 60000000263 Date of first issue: 08.03.2023

Method: OECD Test Guideline 201

Toxicity to microorganisms EC50 (Bacteria): 48 mg/l

Exposure time: 0.5 h

Method: OECD Test Guideline 209

Trimethylpentanediol isobutyrate:

NOEC (Fish): >= 6 mg/l Toxicity to fish

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): >= 1.46 mg/l

Exposure time: 48 h

NOEC (Daphnia (water flea)): 0.7 mg/l

Exposure time: 21 d

Toxicity to algae/aquatic

plants

EC50 (Chlorella pyrenoidosa (algae)): > 7.49 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

LOEC: 0.7 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

**Ecotoxicology Assessment** 

Acute aquatic toxicity This product has no known ecotoxicological effects.

Chronic aquatic toxicity Harmful to aquatic life with long lasting effects.

hydrogen peroxide:

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)): 16.4 mg/l

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : LC50 (Daphnia pulex (Water flea)): 2.4 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Skeletonema costatum (marine diatom)): 1.38 mg/l

Exposure time: 72 h

NOEC (Skeletonema costatum (marine diatom)): 0.63 mg/l

Exposure time: 72 h

Toxicity to microorganisms EC50 (activated sludge): > 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to daphnia and other : aquatic invertebrates (ChronNOEC: 0.63 mg/l Exposure time: 21 d

25 / 33

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

ic toxicity) Species: Daphnia magna (Water flea)

**Butanone:** 

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 2,993 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 308 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 2,029

mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Toxicity to microorganisms : NOEC (Pseudomonas putida): 1,150 mg/l

Exposure time: 16 h

Method: DIN 38 412 Part 8

#### 12.2 Persistence and degradability

#### **Components:**

Diacetone alcohol:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301

2-Butanone, peroxide:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301D

Trimethylpentanediol isobutyrate:

Biodegradability : Result: rapidly biodegradable

Exposure time: 28 d

Method: OECD Test Guideline 301B

hydrogen peroxide:

Biodegradability : Result: Readily biodegradable.

**Butanone:** 

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301D

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

#### 12.3 Bioaccumulative potential

#### Components:

Diacetone alcohol:

Partition coefficient: n-

octanol/water

log Pow: -0.09 (20 °C)

2-Butanone, peroxide:

Partition coefficient: n-

octanol/water

log Pow: < 0.3 (25 °C)

Trimethylpentanediol isobutyrate:

Bioaccumulation : Species: Fish

Bioconcentration factor (BCF): 1.95

Partition coefficient: n-

octanol/water

: log Pow: 4.91 (25 °C)

hydrogen peroxide:

Partition coefficient: n-

octanol/water

log Pow: -1.57 (20 °C)

Remarks: Information refers to the main component.

Calculation

**Butanone:** 

Partition coefficient: n-

octanol/water

log Pow: 0.3 (40 °C)

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

### 12.6 Other adverse effects

**Product:** 

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.

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

Additional ecological infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Toxic to aquatic life.

Harmful 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
IMDG : UN 3105
IATA : UN 3105

### 14.2 UN proper shipping name

**ADR** : ORGANIC PEROXIDE TYPE D, LIQUID

(METHYL ETHYL KETONE PEROXIDE(S))

RID : ORGANIC PEROXIDE TYPE D, LIQUID

(METHYL ETHYL KETONE PEROXIDE(S))

IMDG : ORGANIC PEROXIDE TYPE D, LIQUID

(METHYL ETHYL KETONE PEROXIDE(S))

IATA : Organic peroxide type D, liquid

(Methyl ethyl ketone peroxide(s))

#### 14.3 Transport hazard class(es)

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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- : 570

ger aircraft)

Packing group : Not assigned by regulation

Labels : Organic Peroxides, Keep Away From Heat

#### 14.5 Environmental hazards

**ADR** 

Environmentally hazardous : no

RID

Environmentally hazardous : no

**IMDG** 

Marine pollutant : no

#### 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.

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

### 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 Not applicable

UK REACH Candidate list of substances of very high

concern (SVHC) for Authorisation

Not applicable

The Persistent Organic Pollutants Regulations (retained Pegulation (FLI) 2010/1021 as amended for Great Brit-

Regulation (EU) 2019/1021 as amended for Great Brit-

ain)

Regulation (EC) on substances that deplete the ozone : Not applicable

layer

Regulation (EU) 2019/1148 on the marketing and use of :

explosives precursors

hydrogen peroxide

UK REACH List of substances subject to authorisation

(Annex XIV)

: Not applicable

GB Export and import of hazardous chemicals - Prior

Informed Consent (PIC) Regulation

Not applicable

Control of Major Accident Hazards Regulations P6b

2015 (COMAH)

SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC

PEROXIDES

### Other regulations:

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

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

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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

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**

#### **Full text of H-Statements**

H225 : Highly flammable liquid and vapour.

H242 : Heating may cause a fire.

H271 : May cause fire or explosion; strong oxidizer.

H302 : Harmful if swallowed.

H314 : Causes severe skin burns and eye damage.

H318 : Causes serious eye damage. H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H335 : May cause respiratory irritation. H336 : May cause drowsiness or dizziness.

H361 : Suspected of damaging fertility or the unborn child. H412 : Harmful to aquatic life with long lasting effects.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Org. Perox. : Organic peroxides
Ox. Liq. : Oxidizing liquids
Repr. : Reproductive toxicity
Skin Corr. : Skin corrosion

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

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



# CUROX®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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

### **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®M-402

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

 1.1
 03.01.2025
 600000000263
 Date of first issue: 08.03.2023

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

Classification of the mixture:

#### Classification procedure:

Org. Perox. D	H242	Based on product data or assessment
Acute Tox. 4	H302	Calculation method
Acute Tox. 4	H332	Calculation method
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Repr. 2	H361	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Calculation method

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