

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

Stronghold Summer Catalyst

UFI:

6C00-W0EC-C003-1JSG

<https://my.chemius.net/p/s8MbvB/en/pd/en>

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

Relevant identified uses

Hardener.

Uses advised against

Do not use for purposes other than those prescribed.

1.3 Details of the supplier of the safety data sheet

Supplier

Stronghold Composites Ltd
Unit 5 Omega Business Park, Leopold St
WN5 8EJ Pemberton, United Kingdom
01423886495
enquiries@topseal.co.uk

1.4 Emergency Telephone Number

Emergency

112

Supplier

01423886495

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Org. Perox. D; H242 Heating may cause a fire.
Acute Tox. 4; H302 Harmful if swallowed.
Skin Corr. 1B; H314 Causes severe skin burns and eye damage.
Eye Dam. 1; H318 Causes serious eye damage.
Acute Tox. 4; H332 Harmful if inhaled.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)**Signal word: DANGER****Hazard statements:**

H242 Heating may cause a fire.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.

Supplemental hazard information (EU):

Not applicable.

Precautionary statements:

P233 Keep container tightly closed.
P235 Keep cool.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P315 Get immediate medical advice/attention.
P501 Dispose of contents/container to an approved waste disposal plant.

Contains:

methyl ethyl ketone peroxide

Special provisions

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

2.3 Other hazards

PBT/vPvB

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.

Endocrine disrupting properties

No data.

Additional information

No information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index REACH	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
methyl ethyl ketone peroxide	1338-23-4 215-661-2 - 01-2119514691-43	>= 30 - < 35	Org. Perox. D; H242 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Acute Tox. 4; H332	/	/

Name	CAS EC Index REACH	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
2-methylpentane- 2,4-diol	107-41-5 203-489-0 603-053-00-3 01-2119539582-35	$\geq 1 - < 3$	Skin Irrit. 2; H315 Eye Irrit. 2; H319	/	/
hydrogen peroxide	7722-84-1 231-765-0 008-003-00-9 01-2119485845-22	$\geq 1 - < 2.5$	Ox. Liq. 1; H271 Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318 Acute Tox. 4; H332 STOT SE 3; H335 Aquatic Chronic 3; H412	Ox. Liq. 1; H271; C $\geq 63\%$ Ox. Liq. 2; H272; $50\% \leq C < 63\%$ Skin Corr. 1A; H314; C $\geq 70\%$ Skin Corr. 1B; H314; $50\% \leq C < 70\%$ Skin Irrit. 2; H315; $35\% \leq C < 50\%$ Eye Dam. 1; H318; C $\geq 8\%$ Eye Irrit. 2; H319; $5\% \leq C < 8\%$ STOT SE 3; H335; C $\geq 35\%$	B

Notes for substances

B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: "nitric acid ... %". In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
---	--

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General notes**

When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician. Move out of dangerous area. Do not leave affected person unsupervised. Symptoms may be delayed. Person giving first aid should properly protect himself.

Following inhalation

Remove patient to fresh air - move out of dangerous area. In case of unconsciousness bring patient into stable side position and seek medical attention. Seek medical help immediately. If breathing is irregular or respiratory arrest occurs, provide artificial respiration. Maintain an open airway. Keep at rest in a position comfortable for breathing.

Following skin contact

Take off all contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. If symptoms develop and persist, seek medical attention. Wash contaminated clothes and shoes before reuse.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. After 5 minutes of rinsing, remove contact lenses, if present, and continue rinsing. Consult a physician immediately!

Following ingestion

Do not induce vomiting! Maintain an open airway. Rinse mouth and drink plenty of water (only if the person is conscious). Immediately consult a doctor. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed**Following inhalation**

Harmful if inhaled. Symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain.

Following skin contact

May cause localised redness, swelling, itching, intense pain, blistering, ulceration and tissue destruction.

Following eye contact

Redness, pain, burning sensation, tearing, can cause permanent damage to the eyes. May cause corneal injury.

Following ingestion

May cause abdominal discomfort. May cause nausea/vomiting and diarrhea. Harmful to health. If ingested, may cause burns of the mouth and throat, as well as perforation of the esophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic and supportive treatment.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media**

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Special hazards arising from the substance or mixture**Hazardous combustion products**

In case of a fire toxic gases can be generated; do not inhale gases/smoke.

5.3 Advice for firefighters**Protective actions**

In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training. The product floats on water and may ignite.

Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel**Protective equipment**

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking!

Emergency procedures

Prevent access to unprotected personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing. Pay attention to the vapors that can accumulate to explosive concentrations. Keep out of low areas.

For emergency responders

During intervention, use personal protective equipment (Section 8).

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

6.3 Methods and material for containment and cleaning up**For containment**

Stem the spill if this does not pose risks.

For cleaning up

Use spark-proof tools. Clean up all spills immediately. Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Suppress gases/vapours/mists with water spray jet. Prevent release into the sewer, water, basements or confined areas. Keep away from incompatible materials (see Section 10). Clean contaminated area with plenty of water. Collect and dispose of contaminated washing water. Dispose in accordance with applicable regulations (see Section 13). Never return spills in original containers for reuse.

Other information

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling****Protective measures****Measures to prevent fire**

Ensure adequate ventilation. Take precautionary measures against static discharges. Use spark-proof tools. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Vapours and air form explosive mixtures.

Measures to prevent aerosol and dust generation

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols. Avoid formation of aerosols.

Measures to protect the environment

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures

No information.

Advice on general occupational hygiene

Do not ingest the product. Do not breathe vapours/mist. Avoid contact with skin and eyes. Spilled product should never be returned to its original packaging for reuse. Do not eat, drink or smoke while working. Use good personal hygiene

practices – wash hands at breaks and when done working with material. Wear suitable protective equipment; see Section 8. Prevent the contamination of the product.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Store in accordance with local regulations. Keep away from impurities (rust, dust, ash) - risk of decomposition. Electrical installations /working materials must comply with the technological safety standards. Keep in tightly closed container. Keep in cool and well ventilated area. Store away from strong acids. Keep away from bases. Store separately from heavy metal salts. Keep away from reducing agents.

Packaging materials

Store only in original container.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

Storage temperature

< 30 °C

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

See the technical data sheet on this product for further information.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

Name	mg/m³	ml/m³	Short-term value mg/m³	Short-term value ml/m³	Remark	Biological Tolerance Values
2-Methylpentane-2,4-diol (107-41-5)	123	25	123	25	/	/
Hydrogen peroxide (7722-84-1)	1.4	1	2.8	2	/	/
Methyl ethyl ketone peroxides (MEKP) (1338-23-4)	/	/	1.5	0.2	/	/

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021

Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values

For product

No information.

For components

Name	Type	Exposure route	exp. frequency	Remark	Value
methyl ethyl ketone peroxide	Worker	inhalation	long term systemic effects	/	2.52 mg/m ³
methyl ethyl ketone peroxide	Worker	inhalation	short term systemic effects	/	7.55 mg/m ³
methyl ethyl ketone peroxide	Worker	dermal	long term systemic effects	/	1.43 mg/kg bw/day
methyl ethyl ketone peroxide	Consumer	inhalation	long term systemic effects	/	0.44 mg/m ³
methyl ethyl ketone peroxide	Consumer	dermal	long term systemic effects	/	0.51 mg/kg bw/day
methyl ethyl ketone peroxide	Consumer	oral	long term systemic effects	/	0.26 mg/kg bw/day

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	Value
methyl ethyl ketone peroxide	fresh water	/	0.006 mg/L
methyl ethyl ketone peroxide	water, intermittent release	/	0.056 mg/L
methyl ethyl ketone peroxide	marine water	/	0.001 mg/L
methyl ethyl ketone peroxide	water treatment plant	/	1.2 mg/L
methyl ethyl ketone peroxide	fresh water sediment	dry weight	0.088 mg/kg
methyl ethyl ketone peroxide	marine water sediment	dry weight	0.009 mg/kg
methyl ethyl ketone peroxide	soil	dry weight	0.014 mg/kg

8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Do not breathe vapours/aerosols. Use good personal hygiene practices – wash hands at breaks and when done working with material. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse. Keep eyewash bottles or personal eyewash units and emergency showers available.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

Personal protective equipment

Eye and face protection

Tight-fitting protective goggles (BS EN ISO 16321-1:2022/A1:2025). If there is danger of splash or spray use the face shield. Wear tight-fitting protective goggles and face protection (BS EN ISO 16321-1:2022/A1:2025).

Hand protection

Protective gloves (BS EN ISO 374).

Appropriate materials

Material	Thickness	Penetration Time	Remark
Butyl rubber	0.5 mm	≥ 8 h	/

Skin protection

Choose body protection according to the activity and possible exposure. Cotton protective clothing and shoes that cover the entire foot (BS EN ISO 20345:2022+A1:2024). Apron (BS EN 14605:2005+A1:2009). Protective work clothing resistant to liquid chemicals (BS EN 14605:2005+A1:2009). At high risk of skin exposure chemical suits (BS EN 13034:2005+A1:2009) and boots may be required (BS EN ISO 20345:2022+A1:2024). Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion. Protective antistatic clothing BS EN 1149 (1:2006, 2:1997 and 3:2004, 5:2018), protective antistatic shoes (BS EN ISO 20345:2022+A1:2024).

Respiratory protection

Wear mask (BS EN 136) with filter ABEK (BS EN 14387). For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard BS EN 137, BS EN 138.

Thermal hazards

No information.

Environmental exposure controls

Substance/mixture related measures to prevent exposure

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Important health, safety and environmental information

Physical state	liquid
Shape	No information.
Colour	colourless clear
Odour	mint-like
Odour threshold	No information.
Melting/freezing point or softening point	No information.

Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	> 80 °C
Auto-ignition temperature	No information.
Decomposition temperature	> 60 °C
pH	No information.
Viscosity (dynamic)	ca. 15 mPas
Solubility (Water)	slightly soluble
Solubility (Organic solvent)	soluble soluble Phthalates
Partition coefficient n-octanol/water (log value)	No information.
Vapour pressure	No information.
Density	ca. 1.1 g/cm ³ at 20 °C
Relative vapour/gas density	No information.
Particle characteristics	No information.

9.2 Other information

Information with regard to physical hazard classes

No information.

Other safety characteristics

No information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

In case of contact with incompatible materials, it may also decompose at a lower temperature than SADT.

10.3 Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4 Conditions to avoid

Protect from heat, direct sunlight, open fire, sparks.

10.5 Incompatible materials

Accelerators;

Strong acids.

Strong bases. Heavy metals. Heavy metal salts.

Reducing agents. Avoid impurities (e.g. rust, dust, ash) risk of decomposition.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****(a) Acute toxicity****For product**

Exposure route	Type	Species	Time	Value	Method	Remark
oral	LD ₅₀	rat	/	1479 mg/kg	Calculated	/
inhalation	LC ₅₀	rat	/	4.55 mg/L	Calculated	/

For components

Name	Exposure route	Type	Species	Time	Value	Method	Remark
methyl ethyl ketone peroxide	oral	ATE	/	/	500 mg/kg	/	/
methyl ethyl ketone peroxide	dermal	ATE	/	/	2500 mg/kg bw	/	/
methyl ethyl ketone peroxide	inhalation (dusts/mists)	ATE	/	/	1.5 mg/L/4h	/	/
2-methylpentane-2,4-diol	oral	LD ₅₀	rat	/	4000 mg/kg	OECD 420	/
2-methylpentane-2,4-diol	dermal	LD ₅₀	rabbit	/	7892 mg/kg	OECD 402	/
hydrogen peroxide	oral	LD ₅₀	rat (male)	/	1026 mg/kg	OECD 401	/
hydrogen peroxide	dermal	LD ₅₀	rabbit	/	> 6500 mg/kg	/	/
hydrogen peroxide	inhalation (dusts/mists)	LC ₅₀	rat	4 h	> 0.17 mg/L	/	/

Additional information

Harmful if swallowed. Harmful if inhaled.

(b) Skin corrosion/irritation**For components**

Name	Species	Time	Result	Method	Remark
methyl ethyl ketone peroxide	rabbit	/	Corrosive	/	/
2-methylpentane-2,4-diol	rabbit	72 h	Irritating to skin.	OECD 404	Average score = 4.2

Name	Species	Time	Result	Method	Remark
2-methylpentane-2,4-diol	/	/	Can be absorbed through the skin.	/	/
2-methylpentane-2,4-diol	rabbit	/	Non corrosive.	OECD 404	/
hydrogen peroxide	/	3 min	Corrosive	/	/

Additional information

Causes severe skin burns.

(c) Serious eye damage/irritation**For components**

Name	Exposure route	Species	Time	Result	Method	Remark
methyl ethyl ketone peroxide	/	/	/	Corrosive to eyes.	/	/
2-methylpentane-2,4-diol	/	/	/	Irritating to eyes.	/	/

Additional information

Causes serious eye damage.

(d) Respiratory or skin sensitisation**For components**

Name	Exposure route	Species	Time	Result	Method	Remark
methyl ethyl ketone peroxide	dermal	guinea pig	/	Non sensitising.	OECD 406	/
2-methylpentane-2,4-diol	dermal	guinea pig	/	Non sensitising.	OECD 406	/

Additional information

The product is not classified as sensitising.

(e) (Germ cell) mutagenicity**For components**

Name	Type	Species	Time	Result	Method	Remark
methyl ethyl ketone peroxide	/	/	/	Negative.	OECD 471, 473, 476	/
2-methylpentane-2,4-diol	in-vitro mutagenicity	S. typhimurium TA1535	/	Negative.	OECD 471	with and without metabolic activation
hydrogen peroxide	/	/	/	Negative.	Ames test	/
hydrogen peroxide	in-vitro mutagenicity	/	/	Positive.	OECD 473	/
hydrogen peroxide	in-vivo mutagenicity	mouse (male/female)	/	Negative.	OECD 474	/

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

For components

Name	Reproductive toxicity type	Type	Species	Time	Value	Result	Method	Remark
methyl ethyl ketone peroxide	Effects on fertility	NOAEL	rat	/	50 mg/kg bw/day	Negative.	OECD 421	oral
2-methylpentane-2,4-diol	/	/	/	/	/	Suspected of damaging the unborn child.	/	/

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

No information.

Additional information

STOT SE (single exposure): Not classified.

(i) STOT-repeated exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	Organ	Value	Result	Method	Remark
methyl ethyl ketone peroxide	oral	NOAEL	rat	28 days	/	/	200 mg/kg	/	OECD 407	/
2-methylpentane-2,4-diol	oral	/	rat	90 days	/	/	450 mg/kg bw/day	/	OECD 408	/
hydrogen peroxide	oral	NOAEL	mouse (female)	90 days	/	/	37 mg/kg	/	/	/
hydrogen peroxide	oral	NOAEL	mouse (male)	90 days	/	/	26 mg/kg	/	/	/

Additional information

STOT RE (repeated exposure): Not classified.

(j) Aspiration hazard

No information.

Additional information

Aspiration hazard: Not classified.

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

Endocrine disrupting properties

For product

No data.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
Acute (short-term) toxicity
For components

Name	Type	Value	Exposure time	Species	Organism	Method	Remark
methyl ethyl ketone peroxide	LC ₅₀	18 - 44.2 mg/L	96 h	fish	<i>Poecilia reticulata</i>	OECD 203	/
methyl ethyl ketone peroxide	EC ₅₀	26.7 - 39 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
methyl ethyl ketone peroxide	EC ₅₀	2.1 - 5.6 mg/L	72 h	algae	<i>Raphidocelis subcapitata</i>	OECD 201	/
methyl ethyl ketone peroxide	EC10	12 mg/L	30 min	other organisms	Activated sludge	OECD 209	/
2-methylpentan e-2,4-diol	LC ₅₀	8510 mg/L	96 h	fish	<i>Gambusia affinis</i>	OECD 203	/
2-methylpentan e-2,4-diol	EC ₅₀	5410 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
2-methylpentan e-2,4-diol	ECr50	> 429 mg/L	72 h	algae	<i>Pseudokirchne riella subcapitata</i>	OECD 201	/
hydrogen peroxide	LC ₅₀	16.4 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
hydrogen peroxide	EC ₅₀	2.4 mg/L	48 h	crustacea	<i>Daphnia pulex</i>	/	/
hydrogen peroxide	EC ₅₀	0.63 - 1.38 mg/L	72 h	algae	<i>Skeletonema costatum</i>	/	/
hydrogen peroxide	EC ₅₀	> 1000 mg/L	3 h	/	Activated sludge	OECD 209	/

Chronic (long-term) toxicity
For components

Name	Type	Value	Exposure time	Species	Organism	Method	Remark
2-methylpentane-2,4-diol	NOEC	429 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	/
hydrogen peroxide	NOEC	0.63 mg/L	21 day	crustacea	<i>Daphnia magna</i>	/	/

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

No information.

Biodegradation**For components**

Name	Type	Rate	Time	Evaluation	Method	Remark
methyl ethyl ketone peroxide	/	/	/	readily biodegradable	OECD 301D	/
2-methylpentane-2,4-diol	BOD5/COD	0.81	/	/	/	Rapidly degradable.
hydrogen peroxide	/	/	/	readily biodegradable	/	/

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)**For components**

Name	Value	Temperature °C	pH	Concentration	Method
methyl ethyl ketone peroxide	< 0.3	25	/	/	/
2-methylpentane-2,4-diol	0.58	/	/	/	/
hydrogen peroxide	-1.57	20	/	/	/

Bioconcentration factor (BCF)**For components**

Name	Species	Organism	Value	Duration	Evaluation	Method	Remark
2-methylpentane-2,4-diol	/	/	/	/	Bioaccumulation is not expected.	/	/

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

12.5 Results of PBT and vPvB 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 Endocrine disrupting properties

For product

No data.

12.7 Other adverse effects

No information.

12.8 Additional information

For product

Product is not classified as hazardous for environment. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

For components

2-methylpentane-2,4-diol

Soluble in water.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal

Waste chemical

Dispose of in accordance with applicable waste disposal regulation. Do not allow product to reach drains/sewage systems. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste. Do not contaminate ponds, waterways or ditches with chemical or used container.

Waste codes / waste designations according to LoW

No information.

Packaging

Dispose of in accordance with applicable waste disposal regulation. Dispose of as unused product. Empty container is not suitable for reuse. Deliver completely emptied containers to approved waste disposal authorities. Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents. Empty containers represent a fire hazard as they may contain flammable product residues and vapours. Uncleaned containers should not be perforated, cut or welded.

Waste codes / waste designations according to LoW

No information.

Waste treatment-relevant information

No information.

Sewage disposal-relevant information

No information.

Other disposal recommendations

No information.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

ADR/RID	IMDG	IATA	ADN
UN 3105	UN 3105	UN 3105	UN 3105

14.2 UN proper shipping name

ADR/RID	IMDG	IATA	ADN
ORGANIC PEROXIDE TYPE D, LIQUID (methyl ethyl ketone peroxide)	ORGANIC PEROXIDE TYPE D, LIQUID (methyl ethyl ketone peroxide)	ORGANIC PEROXIDE TYPE D, LIQUID (methyl ethyl ketone peroxide)	ORGANIC PEROXIDE TYPE D, LIQUID (methyl ethyl ketone peroxide)

14.3 Transport hazard class(es)

ADR/RID	IMDG	IATA	ADN
5.2	5.2	5.2	5.2
			

14.4 Packing group

ADR/RID	IMDG	IATA	ADN
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable

14.5 Environmental hazards

ADR/RID	IMDG	IATA	ADN
NO	NO	NO	NO

14.6 Special precautions for user

ADR/RID	IMDG	IATA	ADN
Limited quantities: 125 ml Special provisions: 122, 274 Packing Instructions: P520 Transport category: 2 Tunnel restriction code: (D) Classification code: P1	Limited quantities: 125 ml EmS: F-J, S-R Flash point: 80 °C	Maximum Net Quantity/Package (Max Net Qty/Pkg): Not, Accept	Limited quantities: 125 ml

14.7 Maritime transport in bulk according to IMO instruments

ADR/RID	IMDG	IATA	ADN
/	Goods may not be carried in bulk in bulk containers, containers or vehicles.	/	/

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- EH40/2005 Workplace exposure limits (Fourth Edition 2020)

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents

No information.

Special instructions

Seveso P6b: SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

Indication of changes

No information.

Key literature references and sources for data

No information.

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
 ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 CEN - European Committee for Standardisation
 C&L - Classification and Labelling
 CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
 CAS# - Chemical Abstracts Service number
 CMR - Carcinogen, Mutagen, or Reproductive Toxicant
 CSA - Chemical Safety Assessment
 CSR - Chemical Safety Report
 DMEL - Derived Minimal Effect Level
 DNEL - Derived No Effect Level
 DPD - Dangerous Preparations Directive 1999/45/EC
 DSD - Dangerous Substances Directive 67/548/EEC
 DU - Downstream User
 EC - European Community
 ECHA - European Chemicals Agency
 EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
 EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
 EEC - European Economic Community
 EINECS - European Inventory of Existing Commercial Substances
 ELINCS - European List of notified Chemical Substances
 EN - European Standard
 EQS - Environmental Quality Standard
 EU - European Union
 Euphrac - European Phrase Catalogue
 EWC - European Waste Catalogue (replaced by LoW – see below)
 GES - Generic Exposure Scenario
 GHS - Globally Harmonized System
 IATA - International Air Transport Association
 ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
 IMDG - International Maritime Dangerous Goods

IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006)
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H242 Heating may cause a fire.
H271 May cause fire or explosion; strong oxidiser.
H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.



- ☒ Provided correct labelling of the product
- ☒ Compliance with the local legislation
- ☒ Provided correct classification of the product
- ☒ Provided adequate transport data

© [BENS Consulting](https://www.bens-consulting.com) | www.bens-consulting.com

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.