

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
TM OXO IR

Version number: GHS 4.0
 Replaces version of: 2018-04-09 (GHS 3)

Revision: 2019-11-06

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

1.1 Product identifier

Trade name **TM OXO IR**

Registration number (REACH) not relevant (mixture)

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

Relevant identified uses biocidal product
 cleaning agent
 bleaching agent
 professional use (SU22)
 industrial use (SU3)

Uses advised against this information is not available

1.3 Details of the supplier of the safety data sheet

Thonhauser GmbH
 Perlhofgasse 2/1
 2372 Giesshübl/Wien
 Austria

Telephone: +43 (0)2236 320 272
 Telefax: +43 (0)2236 320 273
 e-mail: QA@thonhauser.net
 Website: www.thonhauser.net

e-mail (competent person) QA@thonhauser.net (Herr Dr. Daniel Herzog)

1.4 Emergency telephone number

Manufacturer **+43 699 141 80 200**
 Mon - Thu 07:00 - 15:00, Fri 07:00 - 13:00

Poison centre & Emergency information service

United Kingdom	CHEMTREC UK 24/7 CCN 819393	+44 870 8200418
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Cat-egory	Hazard class and category	Hazard state-ment
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
3.11	Acute toxicity (inhal.)	4	Acute Tox. 4	H332
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318

For full text of H-phrases: see SECTION 16.

2.2 Label elements

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

- Signal word **danger**

- Pictograms

GHS05, GHS07



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- Hazard statements

H302+H332 Harmful if swallowed or if inhaled.
 H318 Causes serious eye damage.

- Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor/physician.
 P330 Rinse mouth.
 P501 Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling hydrogen peroxide

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.


SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Conc.	Classification acc. to GHS	Pictograms	M-Factors
Hydrogen peroxide	CAS No 7722-84-1 EC No 231-765-0	25 - < 50 wt%	Ox. Liq. 1 / H271 Acute Tox. 4 / H302 Acute Tox. 4 / H332 Skin Corr. 1A / H314 Eye Dam. 1 / H318 STOT SE 3 / H335		

For full text of abbreviations: see SECTION 16.

Regulation 528/2012/EU concerning the making available on the market and use of biocidal products

Biocidal active substances		
Name of substance	W/v	Unit
Hydrogen peroxide	384.2	G/l

SECTION 4: First aid measures

4.1 Description of first aid measures



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General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

nitrogen oxides (NO_x)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

covering of drains

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Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder, Absorbents and binders, neutralising agents.

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Incompatible substances or mixtures: see section 7. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

- Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Floors

The materials shall display sufficient resistance to the prevalent chemical conditions

- Protect against external exposure, such as

frost, direct light irradiation

- Consideration of other advice

Observe technical data sheet.

Lagerklasse (storage class according to TRGS 510, Germany): 5.1 B (oxidising substances)

- Ventilation requirements

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted.

- Packaging compatibilities (Receptacles / Material)

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

These information are not available.

7.4 Other information

Provide for exhaust ventilation of containers.
storage temperature of 0 °C and up to 30 °C
recommended storage temperature: 5 - 20 °C

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
GB	Hydrogen peroxide	7722-84-1	WEL	1	1.4	2	2.8				EH40/2005

Notation

Ceiling-C Ceiling value is a limit value above which exposure should not occur.

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified).

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified).

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)



Eye/face protection

Wear eye/face protection. Use safety goggle with side protection. Use protective eyewear to guard against splash of liquids. EN 166.

Skin protection

- Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Protective gloves - Splash protection

Recommended protective gloves (trademark/manufacturer):

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Chemical protective clothing

Wear suitable protective clothing.

Environmental exposure controls

Before discharge of the waste water into a municipal waste water treatment facility the product normally needs to be neutralised.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	colourless
Odour	characteristic

Other safety parameters

pH (value)	4.2 (20 °C)
Melting point/freezing point	-26 °C
Initial boiling point and boiling range	100 – 106 °C
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapour pressure	32 hPa at 25 °C
Density	1.11 – 1.13 g/cm ³ at 20 °C
Vapour density	this information is not available
Solubility(ies)	not determined
Partition coefficient	
- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidising properties	none

9.2 Other information

Solvent content	100 %
Solid content	0 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Harmful if swallowed. Harmful if inhaled.

- Acute toxicity estimate (ATE)

Oral 1,471 mg/kg.

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
Hydrogen peroxide	7722-84-1	Oral	500 mg/kg
Hydrogen peroxide	7722-84-1	Inhalation: vapour	11 mg/l/4h

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Biodegradation

The relevant substances of the mixture are readily biodegradable.

12.2 Persistence and degradability

Data are not available.

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12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

The application solution can be disposed in the sewage system, taking into account technical and national regulations.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

Properties of waste which render it hazardous

- HP 4 Irritant - skin irritation and eye damage.
- HP 5 Specific target organ toxicity (STOT)/aspiration toxicity.
- HP 6 Acute toxicity.
- HP 8 Corrosive.

List of wastes

Waste catalogue ordinance (Germany)

Assign arising waste to a waste code according to the national list of waste

- Product

16 09 03* Peroxides, e.g. hydrogen peroxide.

- Product residues

15 01 10* Packaging containing residues of or contaminated by dangerous substances.

- Packagings

15 01 02 Plastic packaging.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number	2014
14.2	UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3	Transport hazard class(es)	
	Class	5.1 (oxidizing substances)
	Subsidiary risk(s)	8 (corrosive effects)
14.4	Packing group	II (substance presenting medium danger)
14.5	Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations
14.6	Special precautions for user	
		Provisions for dangerous goods (ADR) should be complied within the premises.

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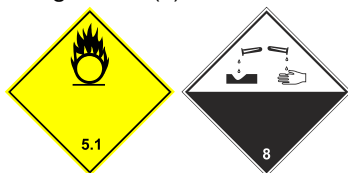
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

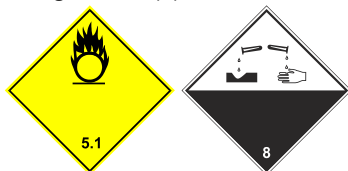
UN number	2014
Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Class	5.1
Classification code	OC1
Packing group	II
Danger label(s)	5.1+8



Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	58
Emergency Action Code	2P

International Maritime Dangerous Goods Code (IMDG)

UN number	2014
Proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Class	5.1
Subsidiary risk(s)	8
Marine pollutant	-
Packing group	II
Danger label(s)	5.1+8



Special provisions (SP)	-
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-H, S-Q
Stowage category	D
Segregation group	16 - Peroxides

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International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	2014
Proper shipping name	Hydrogen peroxide, aqueous solution
Class	5.1
Subsidiary risk(s)	8
Packing group	II
Danger label(s)	5.1+8



Excepted quantities (EQ)	E2
Limited quantities (LQ)	0,5 L

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Deco-Paint Directive (2004/42/EC)

VOC content 0 %

Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content 0 %

Regulation 648/2004/EC on detergents

Labelling of contents	
Constituents	Weight % content (or range)
Oxygen-based bleaching agents	30 % and more

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)

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Abbr.	Descriptions of used abbreviations
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
Ox. Liq.	Oxidising liquid
PBT	Persistent, Bioaccumulative and Toxic
Ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
TWA	Time-weighted average
VOC	Volatile Organic Compounds
VPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

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List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H271	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.