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Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

replaces version 1.1 version 1.2 SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier AIR L.O.G.® pro 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses Ready-to-use solution for room air and surface disinfection. Also suitable for application into the room air using ultrasonic technology in case of occupancy by persons. 1.3 Supplier CuraSolutions GmbH Frauengasse 2.1.1 A-2700 Wiener Neustadt T: +43 2622 32912 Competent person Email: office@curasolutions.at 1.4 **Emergency telephone** Please contact the regional poison center or emergency call. number Austrian toxicity information center Vienna: +43 1 406 43 43 Available 24 hours **SECTION 2:** Hazards identification

2.1 Classification of the substance or mixture

According to regulation (EC) No. 1272/2008

The mixture is not classified as hazardous in sense of CLP regulation (EC) No. 1272/2008.

Safety data sheet available on request.

2.2 Label elements

According to regulation (EC) No. 1272/2008

EUH210

A Hazard components for labelling

None.

2.3 Other hazards

After contact with skin, the product can cause slight, temporary whitish discoloration due to the contained hydrogen peroxide. Slight eve irritation is possible.

Results of PBT and vPvB assessment

PBT: No data available.

vPvB: No data available.

3.2 Mixtures

SECTION 3:

▲ Chemical characterization

Mixture of the following ingredients and nonhazardous additives.

Composition/information on ingredients

CuraSolutions by nature

Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

A Hazardous ingredients

Chemical name	CAS # / EC # / Index #	%-w/w	Classification acc. to (EC) No. 1272/2008*	
Hydrogen peroxide** Reference# acc. to REACH: 01-2119485845-22-xxxx	7722-84-1 / 231-765-0 / 008-003-00-9	1,5 – 1,8	Ox. Liq. 1 Acute Tox. 4 Skin Corr. 1A Acute Tox. 4 STOT SE 3 Aqu. chron. 3	H271 H302 H314 H332 H335 H412
Formic acid** Reference# acc. to REACH: 01-2119491174-37-xxxx	64-18-6 / 200-579-1 / 607-001-00-0	0,2 - 0,25	Flam Liq. 3 Acute Tox. 4 Acute Tox. 3 Skion Corr. 1A Eye Dam. 1	H226 H302 H331 H314 H318 EUH071

* Full text of Hazard statements and hazard categories: see section 16.
 ** Substance with an occupational exposure limit value (see section 8)

SECTION 4: First aid measures

4.1 Description of first aid measures

Seek medical advice if symptoms occur. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing.

▲ In case of inhalation

Provide fresh air. In case of problems, consult a physician. If unconscious, place in recovery position and seek medical advice.

▲ In case of skin contact

After contact with skin, wash with plenty of water and soap. Change contaminated, saturated clothing – wash before reuse. Seek medical advice if symptoms occur.

🔺 In case of eye contact

In case of contact with eyes, flush with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Seek medical advice if symptoms occur.

▲ In case of ingestion

Rinse mouth thoroughly with cold water. Do not induce vomiting. If the patient is fully conscious, give plenty of water to drink. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further information available.

4.3 Indication of any immediate medical attention and special treatment needed

Depending on the condition of the patients, the doctor must assess the symptoms and the overall general condition.

Page 2 of 11



CuraSolutions by nature

Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

SECTION 5: Firefighting measures

5.1 Extinguishing media

▲ Suitable extinguishing media

CO₂, extinguishing powder, water spray Fight larger fires with water spray or alcohol-resistant foam

L Extinguishing media which must not be used for safety reasons

Water jet

5.2 Special hazards arising from the substance or mixture

Non-combustible, but oxidizing. Fire may cause formation of CO_x.

5.3 Advice for firefighters

Special protective equipment:

Wear a self-contained breathing apparatus and chemical protective clothing. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Restricted access to contaminated areas, until cleaning work is finished. Wear personal protection equipment. Avoid contact with skin and eyes. Provide adequate ventilation.

6.2 Environmental precautions

Do not allow large quantities to enter into surface water, ground water or drains.

6.3 Methods and material for containment and cleaning up

Wash away low quantities with water. Absorb large quantities with liquid binding material (e.g. sand, kieselguhr, Universal binder, acid binder) Wash away residues with water. Treat the recovered material as prescribed in the section on waste disposal (section 13).

6.4 Reference to other sections

See protective measures under section 8 and disposal under section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Observe general hygiene measures in the working area. Avoid contact with eyes and skin. Keep container tightly closed. Protect product from contamination. Observe protective measures and safety instructions.

- 7.2 Conditions for safe storage, including any incompatibilities
 - Precautions against fire and explosion

No special measures required.

CuraSolutions by nature

Trade name: AIR L.O.G.® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

A Requirements on storage and packaging/containers

Provide adequate ventilation.

Keep cool and dry. Protect from frost, heat and direct sunlight.

Store in original container.

Do not store together with combustible materials, reducing agents and alkalis.

Incompatibility with materials

Avoid prolonged contact with base metals and sensitive materials. Test material compatibility before use if required.

- Conditions of storage cool
- ▲ Storage category acc. to VCI 12
- 7.3 Specific end use(s)

Ready-to-use solution for room air and surface disinfection - No-Touch-Disinfection. Suitable for application into the room air in case of occupancy by persons using ultrasonic technology.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Observe the member state specific regulations.

MAK (maximum workplace concentrations)-value (valid for A acc. to GKV 2018 Annex 1)

			TMW / KZW*		notes	duration
name	CAS#		[ppm]	[mg/m ³]		[min]
hydrogen peroxide	7722-84-1	MAK	1/2	1.4 / 2.8	Н	8x5(Mow)
Formic acid	64-18-6	MAK	5/5	9/9		Mow

*TMW Daily average value KZW Short-time value instantaneous value н Mow Risk of skin resorption

Occupational workplace limit (valid for D acc. to TRGS 900) - last update 2020

		Limit value		Peak limit	
name	CAS#	[ppm] [mg/m ³]		PEOK IIITIII	
hydrogen peroxide (MAK)	7722-84-1	0.5	0.71	I (1)	
Formic acid	64-18-6	5	9,5	2 (I)	

DNEL-values (derived no-effect level)

name		
hydrogen peroxide		
workers		
long-term exposition – local effects	inhalation	1.4 mg/m ³
short-term exposition – local effects	inhalation	3 mg/m ³



CuraSolutions by nature

Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

consumers				
long-term exposition – local effects	inhalation	0.21 mg/m ³		
short-term exposition – local effects	inhalation	1.93 mg/m ³		
Formic acid				
workers				
workers long-term exposition – local and systemic effects	inhalation	9,5 mg/m ³		
	inhalation	9,5 mg/m ³		

PNEC- values (predicted no-effect concentration)

name	
hydrogen peroxide	
fresh water	0.013 mg/l
sea water	0.013 mg/l
intermittent release (fresh water)	0.014 mg/l
STP	4.66 mg/l
sediment (fresh water)	0.047 mg/kg sediment dw
sediment (sea water)	0.047 mg/kg sediment dw
soil	0.002 mg/kg soil dw
name	
Formic acid	
fresh water	2 mg/l
sea water	0,2 mg/l
intermittent release (fresh water)	1 mg/l
STP	7,2 mg/l
sediment (fresh water)	13,4 mg/kg sediment dw
sediment (sea water)	1,34 mg/kg sediment dw
soil	1,5 mg/kg soil dw

8.2 Exposure control

▲ General protection and hygiene measures

When handling with chemical substances, observe usual precautionary measures.

Keep away from foods and drinks.

When using, do not eat, drink, smoke. Wash hands after working with product.

Avoid contact with skin and eyes.

Change contaminated clothes and wash before reuse.

An eyewash bottle should be made available in the immediate working area.





Trade name: AIR L.O.G.® pro
Print date: 13.08.2020
Revision date: 13.08.2020

version 1.2

replaces version 1.1

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

A Respiratory protection

Not required if used as prescribed. Wear respiratory protection if workplace limits are exceeded.

A Hand protection

Protective gloves (e.g. rubber) are recommended during handling the liquid product. EN 374

The selection of suitable gloves depends not only on the material, but also on other quality characteristics. Breakthrough times and swelling properties of the material must be taken into consideration.

▲ Eye protection

Protective goggles. EN 166

▲ Body protection

Working clothes

A Environmental exposure controls

Do not allow large quantities to enter into surface water, ground water or drains.

SECTI	ON 9:	Physical and chemical pro	perties
9.1	Infc	prmation on basic physical and ch	emical properties
		Physical state / Appearance	liquid
		Colour	Colourless. During longer period of storage slight change of colour is possible.
		Odour	characteristic
		Odour threshold	No information available.
		pH value	Not determined.
		Melting point/range	No information available.
		Boiling point/range	No information available.
		Flash point	n. a.
		Evaporation rate	No information available.
		Flammability (solid, gas)	No information available.
		Upper/lower explosive limits	No information available.
		Vapour pressure (27 °C)	approx. 20 hPa
		Density (20 °C)	No information available.
		Solubility in water (20 °C)	Miscible as required.
		Partition coefficient: n-octanol/water;	No information available.
		Auto-ignition temperature	No information available.

CuraSolutions by nature

Trade name: AIR L.O.G.® pro Prir Re

Print date	e: 13.08.2020		
Revision	date: 13.08.2020	version 1.2	replaces version 1.1
	▲ Decomposition temperature	No information available.	
	🔺 Viscosity	No information available.	
	🔺 Explosion properties	Not explosiv.	
	▲ Oxidising properties	Oxidising properties.	
9.2	Other information		
	None.		
		_ 🔺	
SECTIO	ON 10: Stability and reactivity		
10.1	Reactivity		
	Avoid contamination of the mixture. accelerated.	. The natural decomposition of hydrog	en peroxide will be
10.2	Chemical stability		
	The mixture is stable for at least 12 r	nonths if stored as prescribed.	
10.3	Possibility of hazardous reactions		
	None known.		
10.4	Conditions to avoid		
	Heating, light.		
10.5	Incompatible materials		
	Avoid prolonged contact with base	metals and sensitive materials.	

10.6 Hazardous decomposition products None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological data for the product are not available.

LD₅₀ values of single components relevant for classification (literature data)

name	CAS-No.	
hydrogen peroxide	7722-84-1	$\begin{array}{l} LD_{50} \mbox{ (oral/rat)} = 694 \mbox{ - } 1026 \mbox{ mg/kg} \mbox{ (70\% i.S.)} \\ LD_{50} \mbox{ (dermal/rat)} > 2000 \mbox{ mg/kg} \\ LC_{50} \mbox{ (inhalation/rat/4 h)} > 0.17 \mbox{ mg/l} \mbox{ (50 \% i.S.)} \end{array}$
Formic acid	64-18-6	LD ₅₀ (oral/rat) = 730 mg/kg

Acute toxicity

Based on available data classification criteria are not fulfilled. ATE_{mix} (oral, calculated) > 2000 mg/kg

▲ Skin corrosion/irritation

Based on available data classification criteria are not fulfilled. Skin contact can cause whitish discoloration.



CuraSolutions by nature

Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

▲ Serious eye damage/irritation

Based on available data classification criteria are not fulfilled. Slight irritation is possible.

A Skin/Respiratory sensitization

Based on available data classification criteria are not fulfilled.

▲ Germ cell mutagenicity

The product does not contain any ingredients in a concentration equal or higher than 0.1 %, which are classified as mutagenic.

Based on available data classification criteria are not fulfilled.

▲ Cancerogenicity

The product contains between 1.5 and 1.8 % (w/w) hydrogen peroxide (CAS: 7722-84-1), which is classified by the International Agency for Research on Cancer (IARC) as Group 3 ("Not classifiable as to its carcinogenicity to humans.").

Based on available data classification criteria are not fulfilled.

A Reproductive toxicity

The product does not contain any ingredients in a concentration equal or higher than 0.1 %, which are classified as toxic for reproduction.

Based on available data classification criteria are not fulfilled.

Specific target organ toxicity – single exposure

Based on available data classification criteria are not fulfilled.

▲ Specific target organ toxicity – repeated exposure

Based on available data classification criteria are not fulfilled.

Aspiration hazard

Based on available data classification criteria are not fulfilled.

▲ Other information

The product was classified on the basis of the calculation procedure of the CLP- Regulation (EC) 1272/2008 annex I.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicological data for the product are not available. The product was classified on the basis of the calculation procedure of the CLP- Regulation (EC) 1272/2008.

Aquatic toxicity of ingredients

hydrogen peroxide (CAS: 7722-84-1) (source: foreign-SDS)

LC50 (96 h): 16.4 mg/l – Pimephales promelas ErC50 (72 h): 1.38 mg/l - Algae

Formic acid (CAS: 64-18-6) (source: foreign-SDS)

EC50 (48 h): 365 mg/l – Daphnia magna EC50 (72 h): 1,240 mg/l – Algae (Scenedesmus capricornutum)

CuraSolutions

Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

hydrogen peroxide (CAS: 7722-84-1)

Readily biodegradable.

Formic acid (CAS: 64-18-6)

Readily biodegradable.

12.3 Bioaccumulative potential

hydrogen peroxide (CAS: 7722-84-1)

Log Pow: -1.57 – No siginficant accumulation in organisms.

Formic acid (CAS: 64-18-6)

Log Pow: -1,9 – No siginficant accumulation in organisms.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Do not allow large quantities to enter into surface water, ground water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Any disposal practice must be in compliance with all local and national laws and regulations. Customers are advised to check their local legislation governing the disposal of waste materials. If this preparation becomes a waste, the final user must define and assign the appropriate European Waste Catalogue code. Use only authorized contractors.

Do not allow large quantities to enter into surface water, ground water or drains.

- 🔺 European Waste Catalogue
- 16 09 03* peroxides, e.g. hydrogen peroxide

Notes: The European Waste Catalogue (EWC) classifies waste materials and categorises them according to what they are and how they were produced. This may cause other classifications. The final decision belongs to the last user.

Uncleaned packaging

Recommendation: completely emptied packages can be recycled by authorized contractors.

SECTION 14: Transport information

No dangerous good in sense of the transport regulation for land, air and sea.

14.1 UN number

Not applicable.

14.2 UN proper shipping name

CuraSolutions by nature

Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

Not applicable.

14.3 Transport hazard class(es)

Not applicable. 14.4 Packing group

Not applicable.

- 14.5 Environmental hazards Not applicable.
- 14.6 Special precautions for user Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

Safety Data Sheet according to REACH – Regulation (EC) No. 1907/2006 (resp. Reg. 2015/830 – amendment of REACH Annex II) The mixture was classified on the basis of the calculation procedure of the CLP- Regulation (EC) 1272/2008 (Annex 1).

Other laws:

- A Biocide-regulation (EU) No. 528/2012
- Directive 2012/18/EU Named dangerous substances ANNEX I None of the ingredients is listed.
- Directive 2011/65/EU on the restriction of the use of certain hazardous substances in eletrical and electronic equipment – Annex II None of the ingredients is listed.

National laws:

Austria:

VbF – Regulation on combustible liquids (BGBI 1991/240) Not applicable

Germany:

▲ Ordinance on Installations for the Handling of Substances Hazardous to water (AwSV) of 18.04.2017 WGK 1 (weakly hazardous for water)

15.2 Chemical safety assessment

Not available for the mixture.



CuraSolutions by nature

Trade name: **AIR L.O.G.**® pro Print date: 13.08.2020 Revision date: 13.08.2020

version 1.2

replaces version 1.1

SECTION 16: Other information

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

All materials may present unknown hazards and should be used with caution and only for identified uses described in Section 1. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. No liability can be accepted for damage during handling or contact with the product.

The mixture was classified on the basis of the calculation procedure of the CLP- Regulation (EC) 1272/2008 (Annex 1). The classification of ingredients is based on manufacturer's data and CLP Regulation Annex VI completed by data of the European Chemical Agency (ECHA).

1	Relevant hazard statements
1	

H226	Flammable liquid and vapour.
H271	May cause fire or explosion; strong oxidizer.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
▲ Relevant hazard categories	
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Aqu. Chron. 3	Hazardous to the aquatic environment – chronic hazard, category 4
Eye Dam. 1	Serious eye damage, category 1
Flam. Liq. 3	Flammable liquid, category 3
Ox. Liq. 1	Oxidising liquid, category 1
Skin Corr. 1A	Skin corrosion, category 1A
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity – single exposure, category 3
▲ Version	Version 1.2 replaces 1.1 of 02.07.2020
	Update: 2.3, 8, 11.1, 15.1
	Translation of German version 1.2
🔺 Created by	UmEnA GmbH
	<u>office@umena.at</u>
🔺 Abbreviations	n. a. Not applicable.
	PBT persistent, bioaccumulative, toxic
	vPvB very persistent, very bioaccumulativ

