OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599 Email : info@ottokemi.com, Web : <u>www.ottokemi.com</u>

-----ISO 9001: 2015-----

MATERIAL SAFETY DATA SHEET

SECTION 1 Product identifiers Product name : Hydrogen peroxide, solution, GR 30% Product Code: H 1542 CAS No : 7722-84-1

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 4), H302 Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Long-term (chronic) aquatic hazard (Category 3), H412 For the full text of the H-Statements mentioned in this Section, see Section 16. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger Hazard statement(s) H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eve damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects. Precautionary statement(s) P261 Avoid breathing mist or vapors. Avoid release to the environment. P273 P280 Wear protective gloves/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. P302 + P352 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Supplemental Hazard none Statements Reduced Labeling (<= 125 ml) Pictogram Signal Word Danger Hazard statement(s) Causes serious eye damage. H318 H412 Harmful to aquatic life with long lasting effects. Precautionary statement(s) P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Statements 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.

none

SECTION 3: Composition/information on ingredients 3.2 Mixtures

Supplemental Hazard

Component	Classification	Concentration	
Hydrogen Peroxide			
CAS-No. 7722-84-1	Ox. Liq. 1; Acute Tox. 4;	>= 35 - < 40%	
EC-No. 231-765-0	Skin Corr. 1A; Eye Dam.		
	1; STOT SE 3; Aquatic		
	Chronic 3; H271, H302,		

H332, H314, H318, H335,	
H412	
Concentration limits:	
>= 70 %: Ox. Lig. 1,	
H271; 50 - < 70 %: Ox.	
Lig. 2, H272; >= 70 %:	
Skin Corr. 1A, H314; 50 -	
< 70 %: Skin Corr. 1B,	
H314; 35 - < 50 %: Skin	
Irrit. 2, H315; 8 - < 50 %:	
Eye Dam. 1, H318; 5 - < 8	
%: Eye Irrit. 2, H319; >=	
35 %: STOT SE 3, H335;	
> 40 - < 50 %: Ox. Lig. 3,	
H272:	

*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006.

the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air. Consult doctor if feeling unwell.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section

2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Not combustible.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.Advice for emergency responders:Protective equipment see section 8.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.Observe possible material restrictions (see sections 7 and 10).Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Advice on safe handling Observe label precautions. Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve). No metal containers. Tightly closed. Protected from light. Away from combustible materials and sources of ignition and heat. Recommended storage temperature see product label. Storage class Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated **SECTION 8: Exposure controls/personal protection** 8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Tightly fitting safety goggles Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Latex gloves Minimum laver thickness: 0.6 mm Break through time: > 480 min This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: > 480 min Material tested:KCL 741 Dermatril® L Respiratory protection Recommended Filter type: filter NO The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties				
liquid				
colorless				
ca24 °C				
ca.110 °C at 1.013 hPa				
No data available				
No data available				

flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH l) Viscosity

m) Water solubility at n) Partition coefficient: n-octanol/water o) Vapor pressure p) Density Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties t) Oxidizing properties 9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available 10.2 Chemical stability heat-sensitive Sensitivity to light Contains the following stabilizer(s): Disodium pyrophosphate (0,015 %) phosphoric acid (0,01 %) Ammonium nitrate (0,006 %) 10.3 Possibility of hazardous reactions Risk of explosion with: Risk of ignition or formation of inflammable gases or vapours with: hydrazine and derivatives hvdrides combustible substances Ether anhydrides Oxidizing agents Organic Substances peroxi compounds permanganates organic solvent organic nitro compounds Brass Alkali metals alkali salts Alkaline earth metals Metals metallic oxides Metallic salts nonmetals nonmetallic oxides Aldehydes Alcohols Amines Ammonia Acids strong alkalis Acetaldehyde Acetone Activated charcoal anilines Lead Powdered metals acetic acid

Not applicable No data available

> 100 °C -=

ca.2 - 4 at 20 °C Viscosity, kinematic: No data available Viscosity, dynamic: No data available 20 °C soluble No data available

ca.20 hPa at 20 °C 1,13 g/cm3 at 20 °C No data available No data available

No data available

Not classified as explosive. Oxidizing potential Acetic anhydride Potassium iodides potassium permanganate Methanol sodium oils phosphorus Oxides of phosphorus conc. sulfuric acid Heavy metals silver in powder form alkali hydroxides with Heavy metals vinyl acetate with Catalyst Exothermic reaction with: alkali hydroxides Metals Nitric acid zinc oxide Metallic salts phenol with metal catalysts 10.4 Conditions to avoid Heating. 10.5 Incompatible materials Lead, bronze, Iron, Copper, Brass, silver, Metals, metal alloys 10.6 Hazardous decomposition products In the event of fire: see section 5 **SECTION 11: Toxicological information** 11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available. Special Remarks on Chronic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity Mixture No data available Toxicity to algae IC50 - Chlorella vulgaris (Fresh water algae) - 2,5 mg/l - 72 h (OECD Test Guideline 201) 12.2 Persistence and degradability Biodegradability Remarks: No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 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 Product: Assessment : 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.

12.7 Other adverse effects No interference with wastewater treatment plants are to be expected when used properly. Discharge into the environment must be avoided. No data available Components Hvdrogen Peroxide Toxicity to fish semi-static test LC50 - Pimephales promelas (fathead minnow) - 16,4 mg/l - 96 h (US-EPA) Toxicity to daphnia and other aquatic invertebrates semi-static test LC50 - Daphnia pulex (Water flea) - 2,4 mg/l -48 h (US-EPA) Toxicity to algae static test ErC50 - Skeletonema costatum (marine diatom) -1,38 mg/l - 72 h Remarks: (ECHA) static test NOEC - Skeletonema costatum (marine diatom) -0.63 ma/l - 72 h Remarks: (ECHA) Toxicity to bacteria static test EC50 - activated sludge - 466 mg/l - 30 min (OECD Test Guideline 209) static test EC50 - activated sludge - > 1.000 mg/l - 3 h (OECD Test Guideline 209) **SECTION 13: Disposal considerations** 13.1 Waste treatment methods Product See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions. **SECTION 14: Transport information** 14.1 UN number ADR/RID: 2014 IMDG: 2014 IATA: 2014 14.2 UN proper shipping name ADR/RID: HYDROGEN PEROXIDE, AQUEOUS SOLUTION IMDG: HYDROGEN PEROXIDE, AQUEOUS SOLUTION ΙΑΤΑ· Hydrogen peroxide, aqueous solution 14.3 Transport hazard class(es) ADR/RID: 5.1 (8) IMDG: 5.1 (8) IATA: 5.1 (8) 14.4 Packaging group ADR/RID: II IMDG: II IATA: II 14.5 Environmental hazards ADR/RID: no IMDG Marine pollutant: no IATA: no 14.6 Special precautions for user No data available **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Authorisations and/or restrictions on use
Regulation (EU) 2019/1148 on the marketing and use of explosives precursors
: hydrogen peroxide
Regulation (EU) 2019/1148 on the marketing and use of explosives precursors
: ammonium nitrate
15.2 Chemical Safety Assessment
A Chemical Safety Assessment has been carried out for this substance.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.