Material Safety Data Sheet

Hydrogen Peroxide Food Grade 35% (RXSOL-15-1630-035)

1. Product and Company Identifaction

Product Name	Hydrogen Peroxide Food Grade 35%
Part Number	RXSOL-15-1630-035

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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2. Composition / informationon ingredients

Chemical Name	CAS	EC number	Weight
Hydrogen Peroxide	7722-84-1	231-765-0	>= 35 - 40 %

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H272 May intensify fire; oxidizer. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 Avoid release to the environment. 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. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Classification of the substance or mixture	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
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.
Supplemental Hazard Statements	None

4. First Aid Measures

General advice	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in physician.
Eye Contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
Swallowed	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

Skin Contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.
Inhalation	Remove patient to fresh air, keep warm and at rest and get medical assistance in necessary.
Ingestion	Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.
Most important symptoms and effects, both acute and delaye	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Flammability	May be combustible at high temperature.
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.
Special hazards arising from the substance or mixture	Nature of decomposition products not known. Not combustible. Has a fire-promoting effect due to release of oxygen. Ambient fire may liberate hazardous vapours.
Further information	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Hazardous combustion products	Fire may cause the evolution of Sulphur oxides, nitrogen oxides.
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.
Protective Equipment	Use personal protective equipment.
Specific Hazards Arising from the Chemical	Has a fire-promoting effect due to the release of oxygen. Ambient fire may liberate hazardous vapours.

6. Accidental Release Measures

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. For personal protection see section 8
Spillage	Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition sources. Call for assistance on disposal.
Personal Protection	Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8.
Enviromental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning	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.

7. Handling and Storage

Advice on safe handling	Keep away from open flames, hot surfaces and sources of ignition.
Storage stability	Recommended storage temperature 2 - 8 °C Light sensitive. Handle and open container with care.
Incompatible materials	Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of adequate capacity to hold any accidental spills.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Precautions for safe handling	For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.
Storage conditions	Tightly closed. Do not store near combustible materials.
Storage class	Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Advice on general occupational hygiene	Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.
Requirements for storage	Keep in cool and store under shade.

8. Exposure controls and personal protection

Occupational Exposure limit values	No specific occupational exposure limit has been established.
Exposure controls	No specific additional engineering controls are required. Provide good natural or artificial ventilation.
Engineering Control	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Eye/face protection	Tightly fitting safety goggles
Body Protection	Protective clothing.
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 layer thickness: 0,6 mm Break through time: > 480 min Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M) 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	Required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type ABEK 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.
Other Protection Measure	Handle in accordance with good industrial hygiene and safety practice.
Control of environmental exposure	Do not let product enter drains.
Thermal hazards	No data available

9. Physical and chemical properties

Physical state	Liquid
Colour	Colorless
Odour	No data available
Odor Threshold	Not Applicable
pH	ca.2 - 4 at 20 °C
Melting Point	24 °C
Boiling Point	ca.110 °C at 1.013 hPa
Flash Point	Not Applicable
Evaporation Rate	Not Applicable
Flammability (solid, gas)	No data available
Explosive limits	No Data Available
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	> 100 °C
Vapour pressure	1,13 g/cm3 at 20 °C
Density	Not Applicable
Vapour Density	No Data Available
Freezing point	No data available

Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	No data available
Solubility	20 °C soluble
Ignition temperature	No information available.
Particle characteristics	No data available
Viscosity dynamic	2,3 mPa.s at 15 °C

10. Stability and reactivity

Reactivity	No data available
Stability	heat-sensitive Sensitivity to light Contains the following stabilizer(s): Disodium pyrophosphate (0,015 %) phosphoric acid (0,01 %) Ammonium nitrate (0,006 %)
Possibility of hazardous reactions	Risk of explosion with: Risk of ignition or formation of inflammable gases or vapours with: hydrazine and derivatives hydrides 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 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
Conditions to avoid	Heating.
Incompatible materials	Lead, bronze, Iron, Copper, Brass, silver, Metals, metal alloys
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - 1.193 - 1.270 mg/kg Acute toxicity estimate Inhalation - 4 h - > 20 mg/l - vapor(Calculation method) LD50 Dermal - Rabbit - male and female - > 2.000 mg/kg (US-EPA)
Skin corrosion/irritation	Causes severe burns. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	Sensitisation test: - Guinea pig Result: negative Remarks: (External MSDS)
Toxic Effects on Human	May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer).
Germ cell mutagenicity	Method: OECD Test Guideline 474 Species: Mouse - male and female - Bone marrow Result: negative
Reproductive toxicity	Presumed human reproductive toxicant
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation. - Respiratory Tract
Additional Information	RTECS: AF3675000 Gastrointestinal disturbance To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After uptake of large quantities: muscular symptoms agitation Convulsions Headache Tremors Nausea psychoses
Endocrine disrupting properties	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. Dizziness, Unconsciousness, Diarrhea, Nausea, Vomiting, Headache, Convulsions, muscle twitching, insomnia, shock, Irritation and corrosion, conjunctivitis Risk of serious damage to eyes. Systemic effects: Headache Dizziness Nausea Vomiting Diarrhea insomnia muscle twitching Convulsions Unconsciousness shock Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

Persistence and degradability	No data available

Toxicity	No data available
Bioaccumulative potential	No data available
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 mg/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)
Products Biodegradation	The methods for determining the biological degradability are not applicable to inorganic substances.
Mobility in soil	No Information available
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.
Endocrine disrupting properties	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.
Other adverse effects	No data available

13. Disposal considerations

Disposal methods	The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.
Contaminated packaging	Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
Waste treatment Method	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

UN number	ADR/RID: 2014 IMDG: 2014 IATA: 2014
UN proper shipping name	ADR/RID: HYDROGEN PEROXIDE, AQUEOUS SOLUTION IMDG: HYDROGEN PEROXIDE, AQUEOUS SOLUTION IATA: HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Transport hazard class(es)	ADR/RID: 5.1 (8) IMDG: 5.1 (8) IATA: 5.1 (8)
Packaging group	ADR/RID: II IMDG: II IATA: -
Environmental hazards	ADR/RID: No IMDG: No IATA: No
Special precautions for user	Tunnel restriction code : (C/E)
Further information	Not classified as dangerous in the meaning of transport regulations.
Transport in bulk according to IMOinstruments	No data available

15. Regulatory information

Inventory status	Components are on the following inventories: Polymaleic acid: - US TSCA, Canadian DSL, EU EINECS, Australian AICS, Korean, Philippine PICCS and Chinese Xi irritant R 36/38 Irritant to eyes & skin R 41 Risk of serious damage to eyes S24/25 Avoid contact with skin and eyes S26/28 In case of contact eyes & skin, rinse with plenty water and seek medical advice Section 312/313: Not listed. Not listed under California proposition 65.
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

Safety, health and environmental regulations specific for the product in question	European Inventory of Existing Commercial Chemical Substances (EINECS) -Listed.EC Inventory Listed. United States Toxic Substances Control Act (TSCA) Inventory- Listed. China Catalog of Hazardous chemicals 2015 Not- Listed. New Zealand Inventory of Chemicals (NZIoC)Listed. PICCS -Listed. Vietnam National Chemical Inventory -Listed. IECSC Listed. Korea Existing Chemicals List (KECL) -Listed.
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
Other regulations	Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	A Chemical Safety Assessment has been carried out for this substance.

16. Other information

Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.