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

### 1.1 Product identifier

- Trade name — Hydrogen Peroxide
- Synonyms — Hydroperoxide, Hydrogen dioxide
- Formula — H2O2

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

**Uses of the Substance/Mixture**

- Bleaching agents
- Chemical industry
- Electronic industry
- Metal treatment
- Odour agents
- Oxidizing Agents
- Textile industry
- Water treatment
- Manufacture of pulp, paper and paper products

### 1.3 Details of the supplier of the safety data sheet

**Company**

Prakash Chemicals International Pvt. Ltd.
'Prakash House', 39/40 - Krishna Industrial Estate,
Opp. BIDC, Gorwa, Vadodara, Gujarat - India.

### 1.4 Emergency telephone number

91-265-3926000 - Ask for Quality Manager, Export Department

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Notification of the ministry of industry on the system of classification and hazard communication of hazardous substances B.E. 2555 (GHS 2009)**

| | |
|---|---|
| Oxidizing liquids, Category 2 | H272: May intensify fire; oxidizer. |
| Acute toxicity, Category 4 | H302: Harmful if swallowed. |
| Skin corrosion, Category 1 | H314: Causes severe skin burns and eye damage. |
| Serious eye damage, Category 1 | H318: Causes serious eye damage. |
| Specific target organ toxicity - single exposure Category 3 | H335: May cause respiratory irritation. (Respiratory system) |
| Short-term (acute) aquatic hazard, Category 2 | H401: Toxic to aquatic life. |

### 2.2 Label elements

**Notification of the ministry of industry on the system of classification and hazard communication of hazardous substances B.E. 2555 (GHS 2009)**

**Hazardous products which must be listed on the label**

- CAS-No. 7722-84-1 Hydrogen peroxide

**Pictogram**

**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. |
| - H401 | Toxic to aquatic life. |

**Precautionary statements**

General

- None

Prevention

| | |
|---|---|
| - P210 | Keep away from heat. |
| - P220 | Keep/Store away from clothing/ combustible materials. |
| - P221 | Take any precaution to avoid mixing with combustibles. |
| - P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| - P264 | Wash skin thoroughly after handling. |
| - P270 | Do not eat, drink or smoke when using this product. |
| - P271 | Use only outdoors or in a well-ventilated area. |
| - P273 | Avoid release to the environment. |
| - P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |

Response

| | |
|---|---|
| - P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. |
| - P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| - P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| - P304 + P340 + P310 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| - P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. |
| - P363 | Wash contaminated clothing before reuse. |
| - P370 + P378 | In case of fire: Use water spray to extinguish. |

Storage

| | |
|---|---|
| - P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| - P405 | Store locked up. |

Disposal

| | |
|---|---|
| - P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Other hazards which do not result in classification**

None known.

## SECTION 3: Composition/information on ingredients

### 3.1 Substance

- Not applicable, this product is a mixture.

### 3.2 Mixture

**Information on Components and Impurities**

| Chemical name | CAS-No. | Identification number | GHS Classification | Concentration [%] |
|---|---|---|---|---|
| Hydrogen peroxide | 7722-84-1 | Not applicable | Oxidizing liquids, Category 1 ; H271<br>Acute toxicity, Category 4 ; H302<br>Skin corrosion, Category 1 ; H314<br>Serious eye damage, Category 1 ; H318<br>Specific target organ toxicity - single exposure, Category 3 ; H335 (Respiratory system)<br>Short-term (acute) aquatic hazard, Category 2 ; H401<br>Long-term (chronic) aquatic hazard, Category 3 ; H412<br><br>**Specific concentration limits:**<br><br>C: >= 70 %,<br>Oxidizing liquids, Category 1; H271<br>C: 50 - < 70 %,<br>Oxidizing liquids, Category 2; H272<br>C: >= 70 %,<br>Skin corrosion, Category 1A; H314<br>C: 50 - < 70 %,<br>Skin corrosion, Category 1B; H314<br>C: 35 - < 50 %,<br>Skin irritation, Category 2; H315<br>C: 8 - < 50 %,<br>Serious eye damage, Category 1; H318<br>C: 5 - < 8 %,<br>Eye irritation, Category 2; H319<br>C: >= 35 %,<br>Specific target organ toxicity - single exposure, Category 3; H335 | >= 50 - < 60 |

**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

**General advice**

- Show this safety data sheet to the doctor in attendance.

**In case of inhalation**

- Move to fresh air.
- Oxygen or artificial respiration if needed.
- Victim to lie down in the recovery position, cover and keep him warm.
- Call a physician immediately.

**In case of skin contact**

- Take off contaminated clothing and shoes immediately.
- Wash off immediately with plenty of water.
- Keep warm and in a quiet place.
- Call a physician or poison control centre immediately.
- Wash contaminated clothing before re-use.

**In case of eye contact**

- Call a physician or poison control centre immediately.
- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).
- Take victim immediately to hospital.

**In case of ingestion**

- Call a physician or poison control centre immediately.
- Take victim immediately to hospital.
- If swallowed, rinse mouth with water (only if the person is conscious).
- Do NOT induce vomiting.
- Artificial respiration and/or oxygen may be necessary.

- If victim is conscious:
- If swallowed, rinse mouth with water (only if the person is conscious).
- Do NOT induce vomiting.

- If victim is unconscious:
- Artificial respiration and/or oxygen may be necessary.

### 4.2 Most important symptoms and effects, both acute and delayed

**In case of inhalation**

**Symptoms**

- Breathing difficulties
- Cough
- pulmonary oedema
- Nausea
- Vomiting

**Effects**

- Corrosive to respiratory system.

***Repeated or prolonged exposure***

- Nose bleeding
- Risk of chronic bronchitis

**In case of skin contact**

**Symptoms**
- Redness
- Swelling of tissue

**Effects**
- Corrosive
- Causes severe burns.

**In case of eye contact**

**Symptoms**
- Redness
- Lachrymation
- Swelling of tissue

**Effects**
- Corrosive
- Causes severe burns.
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

**In case of ingestion**

**Symptoms**
- Nausea
- Abdominal pain
- Bloody vomiting
- Diarrhoea
- Suffocation
- Cough
- Severe shortness of breath

**Effects**
- If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.
- Risk of respiratory disorder

### 4.3 Indication of any immediate medical attention and special treatment needed

**Notes to physician**

- Take victim immediately to hospital.
- Immediate medical attention is required.
- Consult with an ophthalmologist immediately in all cases.
- Burns must be treated by a physician.
- If swallowed

- Avoid gastric lavage (risk of perforation).
- Keep under medical supervision for at least 48 hours.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**

- Water
- Water spray

**Unsuitable extinguishing media**

- None

**5.2 Special hazards arising from the substance or mixture**

- Oxidizing
- Contact with combustible material may cause fire.
- Contact with flammables may cause fire or explosions.
- Risk of explosion if heated under confinement.
- Decomposition will cause oxygen release which may intensify fire

**5.3 Advice for firefighters**

**Special protective equipment for firefighters**

- In the event of fire, wear self-contained breathing apparatus.

- Use personal protective equipment.
- Wear chemical resistant oversuit

**Further information**

- Keep product and empty container away from heat and sources of ignition.
- Keep containers and surroundings cool with water spray.
- Approach from upwind.
- 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**

- Evacuate personnel to safe areas.
- Keep people away from and upwind of spill/leak.

**Advice for emergency responders**

- Use personal protective equipment.
- Drying of this product on clothing or combustible materials may cause fire.
- Keep wetted with water.
- Prevent further leakage or spillage.
- Keep away from incompatible products

**6.2 Environmental precautions**

- Should not be released into the environment.
- If the product contaminates rivers and lakes or drains inform respective authorities.

**6.3 Methods and materials for containment and cleaning up**

- Dilute with plenty of water.
- Dam up.
- Do not mix waste streams during collection.
- Soak up with inert absorbent material.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".

**6.4 Reference to other sections**

- Refer to protective measures listed in sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Use only in well-ventilated areas.
- Before all operations, passivate the piping circuits and vessels according to the procedure recommended by the producer.
- Use only clean and dry utensils.
- Never return unused material to storage receptacle.
- Keep away from heat.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Keep away from incompatible products

**Hygiene measures**

- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

**Technical measures/Storage conditions**

- Keep only in the original container.
- Store in a well-ventilated place. Keep cool.
- Store in a receptacle equipped with a vent.
- Keep in properly labelled containers.
- Keep container closed.
- Keep in a bunded area.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Regularly check the condition and temperature of the containers.

- Keep away from:
- Incompatible products

**Packaging material**

**Suitable material**

- aluminium 99,5 %
- stainless steel 304L / 316L
- Approved grades of HDPE.

### 7.3 Specific end use(s)

- Contact your supplier for additional information

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Components with national occupational exposure limits**

| Components | Value type | Value | Basis |
|---|---|---|---|
| Hydrogen peroxide | TWA | 1 ppm | Thailand. Occupational Exposure Limits |

**Components with other occupational exposure limits**

| Components | Value type | Value | Basis |
|---|---|---|---|
| Hydrogen peroxide | TWA | 1 ppm | USA. ACGIH Threshold Limit Values (TLV) |

### 8.2 Exposure controls

**Control measures**

**Engineering measures**

- Provide adequate ventilation.
- Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures**

**Respiratory protection**

- Use respirator when performing operations involving potential exposure to vapour of the product.
- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Respirator with a vapour filter (EN 141)
- Recommended Filter type: ABEK-P2
- Self-contained breathing apparatus in case of: 1) large uncontrolled emissions, 2) insufficient oxygen, 3) the mask and cartridge do not give adequate protection.

**Hand protection**

- Impervious gloves
- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

***Suitable material***

- Nitrile rubber
- Break through time: > 480 min
- Glove thickness: 1.3 mm
- Nitrile/Neopren gloves
- Break through time: 190 min
- Glove thickness: 0.2 mm

**Eye protection**

- Chemical resistant goggles must be worn.
- If splashes are likely to occur, wear:
- Tightly fitting safety goggles
- Face-shield

**Skin and body protection**

- Impervious clothing
  - If splashes are likely to occur, wear:
  - Chemical resistant apron
  - Boots

  - Suitable material
  - PVC
  - Natural Rubber

**Hygiene measures**
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Take off contaminated clothing and shoes immediately.
- Wash contaminated clothing before re-use.
- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls**
- Dispose of rinse water in accordance with local and national regulations.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Physical state: liquid<br>Colour: colourless |
| **Odour** | odourless |
| **Odour Threshold** | No data available |
| **Molecular weight** | 34 g/mol |
| **pH** | 2.0 ( 21 °C)<br>H2O2 50 %<br><br>pKa: 11.6 ( 25 °C) |
| **Melting point/freezing point** | Freezing point: -40.3 °C<br>H2O2 70 % |
| **Initial boiling point and boiling range** | Boiling point/boiling range: 125 °C<br>H2O2 70 % |
| **Flash point** | Not applicable |
| **Evaporation rate (Butylacetate = 1)** | No data available |
| **Flammability (solid, gas)** | Not applicable |
| **Flammability (liquids)** | The product is not flammable. |
| **Flammability/Explosive limit** | Explosiveness:<br>Not explosive<br><br>With certain materials (see section 10). |
| **Auto-ignition temperature** | The product is not flammable. |

| | |
|---|---|
| **Vapour pressure** | 2 hPa ( 30 °C)<br>H2O2 70 % |
| **Vapour density** | 1.02 |
| **Density** | Bulk density: Not applicable |
| **Relative density** | 1.29<br>H2O2 70 % |
| **Relative density** | 1.44 ( 25 °C)<br>Pure substance |
| **Solubility** | Water solubility:<br>soluble |
| | Solubility in other solvents:<br>organic polar solvents : soluble |
| **Partition coefficient: n-octanol/water** | log Pow: -1.57<br>Method: Calculation method |
| **Decomposition temperature** | >= 60 °C<br>Self-Accelerating decomposition temperature (SADT) |
| **Decomposition temperature** | < 60 °C<br>Slow decomposition |
| **Viscosity** | Viscosity, dynamic : 1.26 mPa.s ( 20 °C)<br>H2O2 70 %<br>1.249 mPa.s ( 20 °C)<br>Pure substance |
| **Explosive properties** | No data available |
| **Oxidizing properties** | The substance or mixture is classified as oxidizing with the category 2. |

### 9.2 Other information

| | |
|---|---|
| **Henry's Constant** | 0.00075 Pa.m3/mol (20 °C)<br>not significant, Air, Volatility |
| **Surface tension** | 77.2 mN/m ( 20 °C)<br>H2O2 70 % |
| | 80.4 mN/m ( 20 °C)<br>Pure substance |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

- Strong oxidizer. Contact with other material may cause fire.
- Decomposes on heating with potential large quantities of gas release (oxygen).
- Potential for exothermic hazard

**10.2 Chemical stability**

- Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

- Contact with combustible material may cause fire.
- Contact with flammables may cause fire or explosions.
- Contact with incompatible material may cause exothermic decomposition with gas release.
- Risk of explosion if heated under confinement.
- Fire or intense heat may cause violent rupture of packages.

**10.4 Conditions to avoid**

- Contamination
- To avoid thermal decomposition, do not overheat.

**10.5 Incompatible materials**

- Acids
- Bases
- Metals
- Heavy metal salts
- Powdered metal salts
- Reducing agents
- Organic materials
- Flammable materials

**10.6 Hazardous decomposition products**

- Oxygen

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**

**Acute oral toxicity**

| | |
|---|---|
| Hydrogen peroxide | Acute toxicity estimate : 431 mg/kg - Rat , male and female<br>This product is classified as acute toxicity, category 4<br>Unpublished reports |

**Acute inhalation toxicity**

| | |
|---|---|
| Hydrogen peroxide | LC50 - 4 h ( vapour ) : > 0.17 mg/l - Rat<br>Not classified as hazardous for acute inhalation toxicity according to GHS.<br>Unpublished reports |

**Acute dermal toxicity**

| | |
|---|---|
| Hydrogen peroxide | Acute toxicity estimate : 6,440 mg/kg - Rabbit<br>Test substance: Hydrogen peroxide<br>Not classified as hazardous for acute dermal toxicity according to GHS.<br>Unpublished reports |

| | |
|---|---|
| **Acute toxicity (other routes of administration)** | No data available |

**Skin corrosion/irritation** Causes burns.

**Serious eye damage/eye irritation** Causes serious eye damage.

**Respiratory or skin sensitisation**

Hydrogen peroxide: Does not cause skin sensitisation.
not sensitising

**Mutagenicity**

**Genotoxicity in vitro**

Hydrogen peroxide: Ames test
with and without metabolic activation

positive
Published data

Chromosome aberration test in vitro
with and without metabolic activation

positive
Unpublished reports

**Genotoxicity in vivo**

Hydrogen peroxide: In vivo micronucleus test - Mouse
Oral
Method: OECD Test Guideline 474

negative
Unpublished reports

**Carcinogenicity**

Hydrogen peroxide: No data available

**Toxicity for reproduction and development**

**Toxicity to reproduction/Fertility**

Hydrogen peroxide: No toxicity to reproduction

**Developmental Toxicity/Teratogenicity**

Hydrogen peroxide: No toxicity to reproduction

**STOT**

**STOT - single exposure**

Hydrogen peroxide: Exposure routes: Inhalation
Target Organs: Respiratory Tract
May cause respiratory irritation.

**STOT - repeated exposure**

Hydrogen peroxide: The substance or mixture is not classified as specific target organ toxicant, repeated exposure according to GHS criteria.

Hydrogen peroxide: Inhalation (vapour) 90-day - Rat

NOAEC: 7 ppm
Target Organs: Respiratory Tract
Method: OECD Test Guideline 413
Unpublished reports

90-day - Rat
NOAEL: 100 ppm
Target Organs: Gastrointestinal tract
Method: OECD Test Guideline 408
drinking water
Unpublished reports

**Experience with human exposure** No data available

**Aspiration toxicity** No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

**Aquatic Compartment**

**Acute toxicity to fish**

| | |
|---|---|
| Hydrogen peroxide | LC50 - 96 h : 16.4 mg/l - Pimephales promelas (fathead minnow)<br>semi-static test<br>Analytical monitoring: yes<br><br>Unpublished internal reports<br>Harmful to fish. |

**Acute toxicity to daphnia and other aquatic invertebrates**

| | |
|---|---|
| Hydrogen peroxide | EC50 - 48 h : 2.4 mg/l - Daphnia pulex (Water flea)<br>semi-static test<br>Analytical monitoring: yes<br>Unpublished internal reports<br>Toxic to aquatic invertebrates. |

**Toxicity to aquatic plants**

| | |
|---|---|
| Hydrogen peroxide | ErC50 - 72 h : 2.62 mg/l - Skeletonema costatum (marine diatom)<br>static test<br>Analytical monitoring: yes<br>Unpublished internal reports<br>Toxic to algae. |

**Toxicity to microorganisms**

| | |
|---|---|
| Hydrogen peroxide | EC50 - 0.5 h : 466 mg/l - activated sludge<br>static test<br>Analytical monitoring: yes<br>Method: OECD Test Guideline 209<br>Unpublished internal reports |

| | |
|---|---|
| **Chronic toxicity to fish** | No data available |

**Chronic toxicity to daphnia and other aquatic invertebrates**

| | |
|---|---|
| Hydrogen peroxide | NOEC: 0.63 mg/l - 21 Days - Daphnia magna (Water flea)<br>flow-through test<br>Analytical monitoring: yes<br>Published data<br>Harmful to aquatic invertebrates with long lasting effects. |

**12.2 Persistence and degradability**

| | |
|---|---|
| **Abiotic degradation** | No data available |
| **Physical- and photo-chemical elimination** | No data available |

**Biodegradation**

**Biodegradability**

| | |
|---|---|
| Hydrogen peroxide | Ready biodegradability study:<br>Method: Degradation in sewage treatment plants<br>The substance fulfills the criteria for ultimate aerobic biodegradability and ready biodegradability<br>Inoculum: activated sludge<br>Unpublished internal reports |

**Degradability assessment**

| | |
|---|---|
| Hydrogen peroxide | The product is considered to be rapidly degradable in the environment |

**12.3 Bioaccumulative potential**

**Partition coefficient: n-octanol/water**

| | |
|---|---|
| Hydrogen peroxide | Not potentially bioaccumulable |

**Bioconcentration factor (BCF)**

| | |
|---|---|
| Hydrogen peroxide | Not potentially bioaccumulable |

**12.4 Mobility in soil**

**Adsorption potential (Koc)**

| | |
|---|---|
| Hydrogen peroxide | Adsorption/Soil<br>Koc: 1.58<br>Log Koc: 0.2<br>Method: Structure-activity relationship (SAR)<br>Unpublished reports |

**Known distribution to environmental compartments**

| | |
|---|---|
| Hydrogen peroxide | Ultimate destination of the product : Water |

**12.5 Results of PBT and vPvB assessment** This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

**12.6 Other adverse effects**

**Ecotoxicity assessment**

| | |
|---|---|
| **Short-term (acute) aquatic hazard** | Toxic to aquatic life. |
| **Long-term (chronic) aquatic hazard** | Not classified due to data which are conclusive although insufficient for classification. |

## SECTION 13: Disposal considerations

**13.1Waste treatment methods**

**Product Disposal**

- Limited quantity
- Dilute with plenty of water.
- Flush into sewer with plenty of water.
- Maximum quantity
- Contact manufacturer.
- Contact waste disposal services.
- In accordance with local and national regulations.

**Advice on cleaning and disposal of packaging**

- Empty containers.
- Clean container with water.
- Dispose of rinse water in accordance with local and national regulations.

- Where possible recycling is preferred to disposal or incineration.
- In accordance with local and national regulations.

## SECTION 14: Transport information

**ADR**

| | |
|---|---|
| **14.1 UN number** | UN 2014 |
| **14.2 Proper shipping name** | HYDROGEN PEROXIDE, AQUEOUS SOLUTION |
| **14.3 Transport hazard class** | 5.1 |
| Subsidiary hazard class: | 8 |
| Label(s): | 5.1 (8) |
| **14.4 Packing group** | |
| Packing group | II |
| Classification Code | OC1 |
| **14.5 Environmental hazards** | NO |
| **14.6 Special precautions for user** | |
| Tunnel restriction code | (E) |
| Hazard Identification Number: | 58 |

For personal protection see section 8.

**RID**

| | |
|---|---|
| **14.1 UN number** | UN 2014 |
| **14.2 Proper shipping name** | HYDROGEN PEROXIDE, AQUEOUS SOLUTION |
| **14.3 Transport hazard class** | 5.1 |
| Subsidiary hazard class: | 8 |
| Label(s): | 5.1 (8) |
| **14.4 Packing group** | |
| Packing group | II |
| Classification Code | OC1 |
| **14.5 Environmental hazards** | NO |
| **14.6 Special precautions for user** | |

For personal protection see section 8.

**Inland waterway transport (ADN)**

| | |
|---|---|
| **14.1 UN number** | UN 2014 |
| **14.2 Proper shipping name** | HYDROGEN PEROXIDE, AQUEOUS SOLUTION |
| **14.3 Transport hazard class** | 5.1 |
| Subsidiary hazard class: | 8 |
| Label(s): | 5.1 (8) |
| **14.4 Packing group** | |
| Packing group | II |
| Classification Code | OC1 |
| **14.5 Environmental hazards** | NO |
| **14.6 Special precautions for user** | |
| Hazard Identification Number: | 58 |

For personal protection see section 8.

**IMDG**

| | |
|---|---|
| **14.1 UN number** | UN 2014 |
| **14.2 Proper shipping name** | HYDROGEN PEROXIDE, AQUEOUS SOLUTION |
| **14.3 Transport hazard class** | 5.1 |
| Subsidiary hazard class: | 8 |
| Label(s): | 5.1 (8) |
| **14.4 Packing group** | |
| Packing group | II |
| **14.5 Environmental hazards** | NO |
| **Marine pollutant** | |
| **14.6 Special precautions for user** | |
| EmS | F-H , S-Q |

For personal protection see section 8.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
No data available

**IATA**

| | |
|---|---|
| **14.1 UN number** | UN 2014 |
| **14.2 Proper shipping name** | Not permitted for transport |
| **14.3 Transport hazard class** | Not permitted for transport |
| **14.4 Packing group** | |
| **14.5 Environmental hazards** | NO |
| **14.6 Special precautions for user** | |

| | |
|---|---|
| Packing instruction (cargo aircraft) | Not permitted for transport |
| Packing instruction (passenger aircraft) | Not permitted for transport |

For personal protection see section 8.

Other information : IATA: permitted under 40%

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

## SECTION 15: Regulatory information

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

**Local regulations**

**Thailand Hazardous Substance Act B.E. 2535**

- Banned and/or restricted : Hydrogen peroxide

**Full text of H-Statements**

- H271 May cause fire or explosion; strong oxidiser.
- H272 May intensify fire; oxidizer.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- H401 Toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

- TWA Time weighted average