# Gujarat Alkalies and Chemicals Ltd.
# Vadodara

| **SECTION 1: Product and Company Identification** | | |
|---|---|---|
| **Name** | **HYDROGEN PEROXIDE** | |
| **Company** | M/s Gujarat Alkalies and Chemicals Limited,<br>P.O. Petrochemicals, Dist.: - Vadodara, Gujarat (India), Pin Code: 391346 | |
| **Synonyms** | Hydrogen Dioxide; Peroxide; Carbamide Peroxide | |
| **Emergency Contact Details** | Phone no. | 09979897101, 09879604102 |
| | E-mail | headmarketing@gacl.co.in<br>ccr@gacl.co.in |

| **SECTION 2: Hazards Identification** | |
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| **Emergency Overview** | |
|  | DANGER<br>Harmful if swallowed. Risk of serious damage to eyes. Oxidizing liquids Acute toxicity, Skin corrosion |
| **Potential Health Effects** | |
| **Inhalation** | Acute toxicity |
| **Skin** | Skin corrosion |
| **Eyes** | Serious eye damage |
| **Ingestion** | Rinse mouth Do NOT induce vomiting |
| **Spills** | Causes severe skin burns and eye damage.<br>Harmful to aquatic life with long lasting effects. |
| **Storage** | May cause fire or explosion; strong oxidizer. |
| **Disposal** | Dispose of contents/container to an approved waste disposal plant |

| **SECTION 3: Composition/information on ingredients** | | | |
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| **Component** | **CAS-No.** | **EC-No.** | **Weight %** |
| Hydrogen Peroxide | 7722-84-1 | 231-765-0 | 30 - 50 % |
| Water | 7732-18-5 | 231-791-2 | 50 - 70 % |

| **SECTION 4: First Aid Measures** | |
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| **Inhalation** | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **Skin** | Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician. |
| **Eyes** | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital. |

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| **Ingestion** | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| **Most important symptoms/effects** | May cause fire or explosion; strong oxidizer. Harmful if swallowed.<br>Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects |
| **Notes to Physician** | No data available |

## SECTION 5: Fire Fighting Measures

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| **Suitable Extinguishing Media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. | | |
| **Flash Point** | No data available | **Explosion Limits** | |
| **Auto ignition Temperature** | No data available | **Upper** | No data available |
| | | **Lower** | No data available |
| **Hazardous Combustion Products** | Hydrogen oxygen | | |
| **Specific Hazards Arising from the Chemical** | Corrosive Material. Containers may explode when heated. Oxidizer: Contact with combustible/organic material may cause fire. In the event of fire and/or explosion do not breathe fumes. Thermal decomposition can lead to release of irritating gases and vapors. | | |

**NFPA: Health: 2 Flammability: 0 Reactivity: 3 Special hazards: OX**

## SECTION 6: Accidental Release Measures

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| **Personal Precautions** | Ensure adequate ventilation. Use personal protective equipment. Avoid contact with the skin and the eyes.<br>Do not use steel or aluminium tools or equipment |
| **Environmental precautions** | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. |
| **Methods and materials for containment and cleaning up** | Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. |

## SECTION 7: Handling and Storage

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| **Handling** | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Keep away from sources of ignition - No smoking. |
| **Storage** | Keep containers tightly closed in a dry, cool and well-ventilated place. To maintain product quality. Keep refrigerated. Keep away from direct sunlight. Do not store in metal containers. Containers should be vented periodically in order to overcome pressure buildup. |

## SECTION 8: Exposure Controls/Personal Protection

**Exposure Guidelines:**

| Component | OSHA PEL | ACGIH TLV |
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| Hydrogen Peroxide | 1 ppm TWA | 1 ppm TWA |

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| **Engineering Measures** | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. |
| **Personal Protective Equipment** | |
| **Eye/face Protection** | Tightly fitting safety goggles. Face shield. Use equipment for eye protection tested and approved under appropriate government standards. |
| **Skin and body protection** | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.<br>Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| **Respiratory Protection** | Where risk assessment shows air-purifying respirators are appropriate use respirator cartridges as a backup to engine protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards. |

## SECTION 9: Physical and Chemical Properties

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| **Appearance** | Clear colorless liquid | **Water solubility** | Miscible with water |
| **Odour** | Slightly sharp | **Auto-ignition temperature** | No data available |
| **pH** | 3.3 | **Viscosity** | No data available |
| **Melting point/freezing point** | -33 °C | **Flammability (solid, gas)** | No data available |
| **Initial boiling point and boiling range** | 108 °C @ 760 mmHg | **Decomposition temperature** | > 125°C |
| **Vapour pressure** | 23.3 mmHg @ 30°C | **Relative density** | 1.110 g/cm$^3$ |
| **Vapour density** | > 1.00 | **Oxidizing properties** | Strong oxidizing agents |

## SECTION 10: Stability and Reactivity

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| **Reactive Hazard** | No data available. |
| **Stability** | Stable under normal conditions. Sensitivity to light. |
| **Conditions to Avoid** | Incompatible products. Excess heat. Exposure to light. Combustible material. |
| **Incompatible Materials** | Strong oxidizing agents, Metals, Reducing agents, Alcohols, Ammonia, copper, Copper alloys, lead oxides, Cyanides, Sulfides, lead, Acetone, Aluminum, |
| **Hazardous Decomposition Products** | Hydrogen, oxygen |
| **Hazardous Polymerization** | Hazardous polymerization does not occur. |

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| **Hazardous Reactions** | None under normal processing. |
| **SECTION 11: Toxicological Information** | |
| **Acute toxicity** | No data available |
| **Carcinogenicity** | Not classifiable as to its carcinogenicity to humans |
| **SECTION 12: Ecological Information** | |
| **Eco toxicity** | No data available |
| **Other** | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. |
| **SECTION 13: Disposal Considerations** | |
| **Waste treatment methods** | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. |
| **Product** | Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal facility. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. |
| **Contaminated packaging** | Dispose of as unused product. |
| **SECTION 14: Transport Information** | |
| **UN number** | 2014 |
| **UN proper shipping name** | Hydrogen peroxide, aqueous solutions |
| **Transport hazard class** | 5.1 (8) |
| **Packaging group** | II |
| **Environmental hazards** | No |
| **SECTION 15: Regulatory Information** | |
| To align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) | |
| **SECTION 16: Other Information** | |
| Disclaimer<br>The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. | |