


MATERIAL SAFETY DATA SHEET

Conforms to ISO 11014-1
and the South African Occupational Health and Safety Act 86 of 1993

		Manufacturer/Supplier: Name: Corporate Services Address: Avon Industrial, 7 van Eck Road, Dundee, 3000, KwaZulu-Natal, South Africa Tel no: 00 27 (0) 82 568 2082 Emergency Tel no: 082 568 2082 Contact Person: Andrew Collett		Commercial name: H2O2 Cleaner Chemical name: Hydrogen Peroxide Cleaning Solution Reg. No: Act29GNR529/264869/130/869 Application: Disinfectant and Cleaning Solution Sheet no: MSDS – CS 001-2010 Revision: 01 Date: 28 February 2010 Page: 1 of 3			
		PHYSICAL PROPERTIES		OTHER CHARACTERISTICS		INCOMPATIBILITY	
Appearance Odour PH Boiling point Coefficient of oil/water Melting point Flash point Freezing point Explosive Properties Oxidising properties Percent volatile Vapour pressure Density/weight per volume Solubility in water Evaporation rate Specific gravity Vapor density Vapor pressure		Clear colourless liquid Odourless (as is) 1.0 to 3.0 1% solution: 5.0 – 6.0 110°C (229°F) (40%); 114°C (237°F) (50%) Not available Non combustible -41.4°C (-42.5°F) (40%); -52°C (-62°F) (50%) With flammable liquids and certain chemicals Strong oxidiser 100% 12mbar at 20°C 1.19 (in H2O % by wt) 100% Above 1 (Butyl Acetate = 1) (H2O = 1) 1.15 @ 20°C/4°C (40%); 1.19 @ 20°C/4°C (50%) Not available 22 mmHg @ 30°C (40%); 18.3 mmHg @ 30°C (50%)		Clear, colourless, odourless liquid Oxidizer Decomposes yielding oxygen that supports combustion of organic matters and can cause overpressure if confined. Corrosive to eyes, nose, throat, lungs and gastrointestinal tract. CONDITIONS TO AVOID: Excessive heat or contamination could cause product to become unstable. STABILITY: Stable (heat and contamination could cause decomposition) POLYMERIZATION: Will not occur		Contact with combustibles may cause fire. INCOMPATIBLE MATERIALS: Reducing agents, wood, paper and other combustibles, iron and other heavy metals, copper alloys and caustic . Beware Caustic Soda. Reaction violent. HAZARDOUS DECOMPOSITION PRODUCTS: Oxygen that supports combustion. COMMENTS: Materials to Avoid: Dirt, organics, cyanides and combustibles such as wood, paper, oils, Caustic etc.	
Hazard Rating HAZCHEM		SAPMA: HHR 4 OEL 1.4 mg/m ³ (<60%) Corrosive		DEGREE OF HAZARD HEALTH : Serious PHYSICAL: Slight FIRE : None			
HAZARDS/SYMPTOMS		PREVENTION AND PERSONAL PROTECTION		FIRE EXTINGUISHING AGENTS/FIRST AID			
<u>FIRE AND EXPLOSION:</u>		Fire hoses and close proximity fire hydrants		EXTINGUISHING MEDIA: Flood with water. FIRE / EXPLOSION HAZARDS: Product is non-combustible. On decomposition releases oxygen that may intensify fire. FIRE FIGHTING PROCEDURES: Any tank or container surrounded by fire should be flooded with water for cooling. Wear full protective clothing and self-contained breathing apparatus			
<u>INHALATION (BREATH):</u>		The use of a supplied air or SCBA respirator is required in lieu of a vapour cartridge respirator. If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA), or other approved atmospheric-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)). DO NOT use any form of air-purifying respirator (APR) or filtering face piece (AKA dust mask), especially those containing oxidizable sorbants such as activated carbon		Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor			

<p><u>SKIN / BODY CONTACT:</u></p>	<p>For body protection wear impervious clothing such as an approved splash protective suit made of SBR Rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/Gore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C).</p> <p>For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Over boots made of Latex or PVC, as well as fire-fighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboots made of nylon or nylon blends. DO NOT use cotton, wool or leather, as these materials react RAPIDLY with higher concentrations of Hydrogen Peroxide.</p> <p>Completely submerge Hydrogen Peroxide contaminated clothing or other materials in water prior to drying. Residual Hydrogen Peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.</p> <p>GLOVES: For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. DO NOT use cotton, wool or leather for these materials react RAPIDLY with higher concentrations of Hydrogen Peroxide. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.</p>	<p>Immediately flush with plenty of water while removing contaminated clothing and/or shoes, and thoroughly wash with soap and water. See a medical doctor immediately.</p>
<p><u>EYE CONTACT:</u></p>	<p>Safety goggles. Use chemical splash-type mono-goggles and a full-face shield made of polycarbonate, acetate, polycarbonate/acetate, PETG or thermoplastic</p>	<p>Immediately flush with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. See a medical doctor or ophthalmologist immediately</p>
<p><u>INGESTION (SWALLOW):</u></p>		<p>Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.</p>
<p><u>NOTE TO MEDICAL PRACTITIONER:</u></p> <p>Hydrogen Peroxide at these concentrations is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.</p>		
<p>SPILLAGE</p>	<p>STORAGE</p>	<p>PACKAGING & LABELLING</p>
<p>Dilute with a large volume of water and hold in a pond or diked area until hydrogen peroxide decomposes. Hydrogen Peroxide may be decomposed by adding sodium metabisulfite or sodium sulphite after diluting to about 5%.</p> <p>Dispose according to methods outlined for waste disposal. Combustible materials exposed to Hydrogen Peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all Hydrogen Peroxide is removed.</p> <p>Residual Hydrogen Peroxide that is allowed to dry (upon evaporation Hydrogen Peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.</p>	<p>STORAGE: Store drums in cool areas out of direct sunlight and away from combustibles. For bulk storage refer to FMC Technical Bulletins.</p> <p>VENTILATION: Provide mechanical general and/or local exhaust ventilation to prevent release of vapour or mist into the work environment.</p>	<p>Avoid cotton, wool and leather. Avoid excessive heat and contamination. Contamination may cause decomposition and generation of oxygen gas, which could result in high pressures and possible container rupture.</p> <p>Hydrogen Peroxide should be stored only in vented containers and transferred only in a prescribed manner (see FMC Technical Bulletins).</p> <p>Never return unused Hydrogen Peroxide to original container, empty drums should be triple rinsed with water before discarding.</p> <p>Utensils used for handling Hydrogen Peroxide should only be made of glass, stainless steel, aluminium or plastic.</p>

TRANSPORT	DISPOSAL	OTHER
<p>PROPER SHIPPING NAME: H2O2 CLEANER, aqueous solutions of 50% Hydrogen Peroxide.</p> <p>PRIMARY HAZARD CLASS / DIVISION: 5.1 (Oxidizer) LABEL (S): Oxidizer, Corrosive PLACARD (S): 5.1 (Oxidizer)</p> <p>ADDITIONAL INFORMATION: DOT Marking: Hydrogen Peroxide 50% aqueous solution. Spec: HDPE drums. Contact FMC for specific details.</p> <p>DEPARTMENT CIVIL AVIATION H2O2 CLEANER, aqueous solutions of 50% Hydrogen Peroxide is forbidden on Passenger and Cargo Aircraft, as well as Cargo Only Aircraft.</p> <p>OTHER INFORMATION: Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drum on wooden pallets.</p>	<p>METHOD: An acceptable method of disposal is to dilute with a large amount of water and allow the Hydrogen Peroxide to decompose followed by discharge into a suitable treatment system in accordance with all regulatory agencies.</p> <p>The appropriate regulatory agencies should be contacted prior to disposal.</p>	
<p>NOTE:</p> <p>The information and recommendations presented in this data sheet are to the best of our knowledge and belief accurate and reliable, but do not constitute a warranty.</p> <p>None of our representatives or agents are authorized to give any guarantee or warranty or make any representation in addition or contrary to the above and we do not accept liability for claims of any kind for any loss, including, without limitation, consequential loss, injury or damage arising from the use of the information or recommendations, or of the products, which are subject matter thereof.</p> <p>The products are sold subject to our standard conditions of sale and tender, copies of which are available on request.</p>		