

Warehouse

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: L1111

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - L1111

WATER-JEL(R+) TECHNOLOGIES
MATERIAL SAFETY DATA SHEET
HYDROGEN PEROXIDE
MSDS NO.: 010
REVISION NO.: 1
DATE: 11/30/04

PRODUCT AND COMPANY INFORMATION - SECTION 1

MANUFACTURER/DISTRIBUTOR:
WATER-JEL TECHNOLOGIES
243 VETERANS BOULEVARD
CARLSTADT, NJ 07072
201-507-8300
800-275-3433

PRODUCT NAME: HYDROGEN PEROXIDE

SYNONYMS:
HYDROGEN DIOXIDE SOLUTION, DIHYDROGEN DIOXIDE, HYDROGEN DIOXIDE,
HYDROPEROXIDE, PEROXIDE

INTENDED USE: FIRST AID TREATMENT FOR MINOR CUTS AND SCRAPES.

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT:
IN THE CONTINENTAL U.S.: 800-275-3433
FOR ADDITIONAL INFORMATION: 201-507-8300

COMPOSITION INFORMATION - SECTION 2

CHEMICAL NAME: HYDROGEN PEROXIDE

PERCENT: 3

CAS NUMBER: 7722-84-1

EXPOSURE LIMITS:
OSHA PEL: 1 PPM (1.4 MG/M3)

CHEMICAL NAME: WATER

PERCENT: 97

CAS NUMBER: 7732-18-5

EXPOSURE LIMITS: NO INFORMATION AVAILABLE

HAZARDS IDENTIFICATION - SECTION 3

EMERGENCY OVERVIEW & HAZARDS PRESENT TO MAN AND THE ENVIRONMENT:
CAUTION!
MAY CAUSE SKIN IRRITATION. MAY CAUSE RESPIRATORY AND DIGESTIVE TRACT
IRRITATION. MAY CAUSE SEVERE EYE IRRITATION AND POSSIBLE INJURY.

PRIMARY ROUTES OF EXPOSURE: INGESTION, EYE CONTACT.

POTENTIAL HEALTH EFFECTS:

EYES: CAUSES IRRITATION, REDNESS, AND PAIN.

SKIN:
MAY CAUSE SKIN IRRITATION. CONTACT ON BURN OR OPEN SKIN MAY CAUSE STINGING
PAIN OR IRRITATION.

INHALATION: MAY CAUSE RESPIRATORY IRRITATION.

INGESTION:
LARGE ORAL DOSES MAY CAUSE IRRITATION AND BLISTERING TO THE MOUTH, THROAT,
AND ABDOMEN. MAY ALSO CAUSE ABDOMINAL PAIN, VOMITING, AND DIARRHEA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
INDIVIDUALS WITH PRE-EXISTING RESPIRATORY CONDITIONS.

CHRONIC HEALTH EFFECTS:

EYES: MAY CAUSE CORNEAL INJURY.

SKIN: MAY CAUSE SKIN DISCOLORATION.

INHALATION:
REPEATED EXPOSURE MAY LEAD TO CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.

INGESTION: MAY LEAD TO DISTENTION OF THE ESOPHAGUS AND STOMACH.

FIRST AID MEASURES - SECTION 4

SEEK MEDICAL ATTENTION FOR ALL CASES OF OVEREXPOSURE.

FIRST AID MEASURES:

EYES:
IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST FIFTEEN (15)
MINUTES, LIFTING LOWER AND UPPER EYELIDS OCCASIONALLY. GET MEDICAL
ATTENTION IMMEDIATELY.

SKIN:
NOT EXPECTED TO REQUIRE FIRST AID MEASURES. WASH EXPOSED AREA WITH SOAP
AND WATER. GET MEDICAL ADVICE IF IRRITATION DEVELOPS.

INHALATION:
REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF
BREATHING IS DIFFICULT, GIVE OXYGEN. DO NOT USE MOUTH-TO-MOUTH
RESUSCITATION.

INGESTION:
GIVE SEVERAL GLASSES OF WATER TO DRINK TO DILUTE. IF LARGE AMOUNTS ARE
SWALLOWED, SEEK MEDICAL ADVICE.

INSTRUCTIONS FOR PHYSICIAN: TREAT SYMPTOMATICALLY AND SUPPORTIVELY.

FIRE FIGHTING MEASURES - SECTION 5

NEPA CLASSIFICATION:

HEALTH 1
FIRE 0
REACTIVITY 1
OTHER 1-CONTACT

FLAMMABILITY PROPERTIES:

FLASH POINT: N/A
METHOD: N/A

FLAMMABILITY LIMITS (IN AIR % BY VOLUME):

LEL: N/A
UEL: N/A

AUTOIGNITION TEMPERATURE: N/A.

HAZARDOUS COMBUSTION PRODUCTS:
NITROGEN OXIDES, HYDROGEN GAS, OXYGEN, HYDRAZOIC ACID.

EXTINGUISHING MEDIA:
USE EXTINGUISHING MEDIA MOST APPROPRIATE FOR THE SURROUNDING FIRE. USE
FLOODING QUANTITIES OF WATER AS SPRAY.

PROHIBITED EXTINGUISHING MEDIA:
CARBON DIOXIDE OR OTHER EXTINGUISHING AGENTS THAT SMOOTHER FLAMES ARE NOT
EFFECTIVE IN EXTINGUISHING FTRES INVOLVING OXIDIZERS.

FIREFIGHTING INSTRUCTIONS:
AS IN ANY FIRE, WEAR A SELF-CONTAINED BREATHING APPARATUS IN PRESSURE-
DEMAND, MSHA/NIOSH (APPROVED OR EQUIVALENT), AND FULL PROTECTIVE GEAR.
NON-COMBUSTIBLE, SUBSTANCE ITSELF DOES NOT BURN BUT MAY DECOMPOSE UPON
HEATING TO PRODUCE IRRITATING, CORROSIVE AND/OR TOXIC FUMES.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NO INFORMATION AVAILABLE.

ACCIDENTAL RELEASE MEASURES - SECTION 6

ENVIRONMENTAL PRECAUTIONS:
AVOID RUNOFF INTO STORM SEWERS AND DITCHES, WHICH LEAD TO WATERWAYS. CLEAN
UP SPILLS IMMEDIATELY OBSERVING PRECAUTIONS IN SECTION 8, EXPOSURE
CONTROLS/PERSONAL PROTECTION. PROVIDE VENTILATION.

CLEANUP METHODS:

SMALL SPILLS: DILUTE WITH WATER AND MOP UP.

LARGE SPILLS:
ABSORB SPILL WITH INERT MATERIAL (E.G. VERMICULITE, SAND OR EARTH), THEN
PLACE IN SUITABLE CONTAINER.

HANDLING & STORAGE - SECTION 7

HANDLING:
WASH THOROUGHLY AFTER HANDLING. USE WITH ADEQUATE VENTILATION. AVOID
CONTACT WITH EYES, SKIN, AND CLOTHING. KEEP CONTAINER TIGHTLY CLOSED.
AVOID INGESTION AND INHALATION.

STORAGE:
STORE IN A TIGHTLY CLOSED CONTAINER. STORE IN A COOL, DRY, WELL-VENTILATED
AREA AWAY FROM INCOMPATIBLE SUBSTANCES.

SPECIFIC USES: FIRST AID TREATMENT FOR MINOR CUTS AND SCRAPES.

EXPOSURE CONTROLS/PERSONAL PROTECTION - SECTION 8

EXPOSURE CONTROLS:

EXPOSURE LIMIT VALUES:

Table with 3 columns: Chemical Name, OSHA PEL, ACGIH TLV. Row 1: HYDROGEN PEROXIDE, 1 PPM (1.4 MG/M3), 1 PPM TWA (1.4 MG/M3)

ENGINEERING CONTROLS:
FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD BE EQUIPPED WITH AN
EYEWASH FACILITY AND A SAFETY SHOWER. USE ADEQUATE VENTILATION TO KEEP
AIRBORNE CONCENTRATIONS LOW.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: REPLACE WITH PPE INFORMATION.

HAND PROTECTION: WEAR APPROPRIATE PROTECTIVE GLOVES.

EYE/FACE PROTECTION:
WEAR APPROPRIATE PROTECTIVE EYEGLASSES OR CHEMICAL SAFETY GOGGLES AS
DESCRIBED BY OSHA'S EYE AND FACE PROTECTION REGULATIONS IN 29 CFR 1910.133
OR EUROPEAN STANDARD EN166.

SKIN PROTECTION:
WEAR APPROPRIATE PROTECTIVE GLOVES AND CLOTHING TO PREVENT SKIN EXPOSURE.

GENERAL HYGIENE CONSIDERATIONS:
WASH THOROUGHLY AFTER HANDLING. DO NOT TAKE INTERNALLY. EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

OTHER PROTECTIVE EQUIPMENT:
FOLLOW THE OSHA RESPIRATOR REGULATIONS FOUND IN 29 CFR 1910.134 OR EUROPEAN STANDARD EN 149. ALWAYS USE A NIOSH OR EUROPEAN STANDARD EN 149 APPROVED RESPIRATOR WHEN NECESSARY.

PHYSICAL & CHEMICAL PROPERTIES - SECTION 9

PRODUCT: HYDROGEN PEROXIDE

GENERAL INFORMATION:
APPEARANCE: CLEAR LIQUID
ODOR: SLIGHT

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION:

BOILING POINT: >100 DEG C

MELTING POINT: NO INFORMATION AVAILABLE

FLASH POINT: NO INFORMATION AVAILABLE

EXPLOSIVE PROPERTIES: NO INFORMATION AVAILABLE

OXIDIZING PROPERTIES: NO INFORMATION AVAILABLE

SPECIFIC GRAVITY (H2O=1): >1.000

WATER SOLUBILITY: SOLUBLE.

PARTITION COEFFICIENT (N-OCTANOL/WATER): NO INFORMATION AVAILABLE

VISCOSITY: NO INFORMATION AVAILABLE

VAPOR PRESSURE (MMHg): NO INFORMATION AVAILABLE

VAPOR DENSITY (AIR=1): >1.00

EVAPORATION RATE: NO INFORMATION AVAILABLE

% VOLATILE (BY VOLUME @ 68 DEG. F): NO INFORMATION AVAILABLE

STABILITY & REACTIVITY - SECTION 10

STABILITY: DECOMPOSES SLOWLY TO RELEASE OXYGEN.

CONDITIONS TO AVOID:
INCOMPATIBLE MATERIALS, LIGHT, IGNITION SOURCES, METALS, EXCESS HEAT, REDUCING AGENTS, ALKALINE MATERIALS, OXIDIZERS, AND TEMPERATURES ABOVE 300 C.

MATERIALS TO AVOID:
HYDROGEN PEROXIDE IS INCOMPATIBLE WITH ACETAL + ACETIC ACID, ACETALDEHYDE + DESICCANTS, ACETIC ACID, ACETIC ACID + N-HETEROCYCLES, ACETIC ACID + 3-THIOETANOL, ACETIC ANHYDRIDE, ACETONE, ALCOHOLS, ALCOHOLS + SULFURIC ACID, ALUMINUM ISOPROPOXIDE + HEAVY METAL SALTS, 2-AMINO-4-METHYLOXAZOLE, AROMATIC HYDROCARBONS + TRIFLUOROACETIC ACID, AZALAIC ACID + SULFURIC ACID, BENZENESULFONIC ANHYDRIDE, TERT-BUTANOL + SULFURIC ACID, CARBOXYLIC ACIDS, CARBON, COAL, DIETHYL ETHER, 3,5-DIMETHYL-3-HEXANOL + SULFURIC ACID, DIMETHYLPHENYLPHOSPHINE, DIPHENYL DISELENIDE, 2-ETHOXYETHANOL + POLYACRYLAMIDE + TOLUENE, ETHYL ACETATE, FORMIC ACID + METABORIC ACID, CADOLIUM HYDROXIDE, GALLIUM + HYDROCHLORIC ACID, HYDROGEN + PALLADIUM CATALYST, HYDROGEN SELENIDE, IRON (III) SULFATE + 2-METHYLPYRIDINE + SULFURIC ACID, IRON (II) SULFATE + NITRIC ACID + SODIUM CARBOXYMETHYLCELLULOSE, KETENE, KETONES + NITRIC ACID, LEAD + TRIOXANE, LITHIUM TETRAHYDROALUMINATE, MERCURY (II) OXIDE + NITRIC ACID, METALS, METAL OXIDES OR METAL SALTS, METHANOL + TERT-AMINE + PLATINUM CATALYST, METHANOL + PHOSPHORIC ACID, 4-METHYL-2,4,6-TRIAZATRICYCLO-UNDECA-8-ENE-3,5-DIONE + POTASSIUM HYDROXIDE, NITRIC ACID + SOILS, NITRIC ACID + THIOUREA, NITROGENOUS BASES, ORGANIC COMPOUNDS, ORGANIC MATERIALS + SULFURIC ACID, OXYGENATED COMPOUNDS, 2-PHENYL-1,1-DIMETHYLETHANOL + SULFURIC ACID, ALPHA-PHENYLSSELENOKETONES, PHOSPHORUS, PHOSPHORUS (V) OXIDE, POLY (ACETOXYACRYLIC ACID LACTONE) + POLY(2-HYDROXYACRYLIC ACID), SULFURIC ACID, TETRAHYDROTHIOPHENE, TIN(II) CHLORIDE, UNSATURATED COMPOUNDS, AND VINYL ACETATE.

HAZARDOUS DECOMPOSITION PRODUCTS:
NITROGEN OXIDES, HYDROGEN GAS, OXYGEN, HYDRAZOIC ACID.

HAZARDOUS POLYMERIZATION: NO INFORMATION AVAILABLE

TOXICOLOGICAL INFORMATION - SECTION 11

TYPE OF TEST	ROUTE OF EXPOSURE	EFFECTS	SPECIES OBSERVED	DOSE DATA
LD50 (HYDROGEN PEROXIDE)	INHALATION	DEATH	RAT	2000 MG/M3
LD50 (HYDROGEN PEROXIDE)	ORAL	DEATH	MOUSE	2000 MG/KG
LD50 (HYDROGEN PEROXIDE)	ORAL	DEATH	RABBIT	820 MG/KG
LD50 (HYDROGEN PEROXIDE)	ORAL	DEATH	RAT	1518 MG/KG
LD50 (WATER)	ORAL	DEATH	RAT	>90 ML/KG

ECOLOGICAL INFORMATION - SECTION 12

ECOTOXICITY: NO INFORMATION AVAILABLE.

MOBILITY: NO INFORMATION AVAILABLE.

PERSISTENCE AND DEGRADABILITY: NO INFORMATION AVAILABLE.

BIOACCUMULATIVE POTENTIAL: NO INFORMATION AVAILABLE.

DISPOSAL CONSIDERATION - SECTION 13

CHEMICAL WASTE GENERATORS MUST DETERMINE WHETHER A DISCARDED CHEMICAL IS CLASSIFIED AS A HAZARDOUS WASTE. US EPA GUIDELINES FOR THE CLASSIFICATION DETERMINATION ARE LISTED IN 40 CFR PARTS 261.3. ADDITIONALLY, WASTE GENERATORS MUST CONSULT STATE AND LOCAL HAZARDOUS WASTE REGULATIONS TO ENSURE COMPLETE AND ACCURATE CLASSIFICATION.

TRANSPORT INFORMATION - SECTION 14

DOT CLASSIFICATION:

UN NUMBER:
CLASS:
PROPER SHIPPING NAME: NOT REGULATED FOR DOMESTIC TRANSPORTATION.
PACKING GROUP:
MARINE POLLUTANT:
OTHER INFORMATION:

IATA CLASSIFICATION:

UN NUMBER:
CLASS:
PROPER SHIPPING NAME: NOT REGULATED FOR INTERNATIONAL AIR TRANSPORTATION.
PACKING GROUP:
MARINE POLLUTANT:
OTHER INFORMATION:

IMDG CLASSIFICATION:

UN NUMBER:
CLASS:
PROPER SHIPPING NAME: NOT REGULATED FOR INTERNATIONAL WATER TRANSPORTATION.
PACKING GROUP:
MARINE POLLUTANT:
OTHER INFORMATION:

REGULATORY INFORMATION - SECTION 15

US REGULATIONS:

ACGTH:
LISTED - HYDROGEN PEROXIDE - TWA: 1 PPM (1.4 MG/M3)

CAA SECTION 112: NOT LISTED

CERCLA: NOT LISTED

TARC: LISTED - HYDROGEN PEROXIDE - GROUP 3 OR 4

NTP: NOT LISTED

OSHA:
LISTED - HYDROGEN PEROXIDE - PEL: 1 PPM (1.4 MG/M3)

SARA TITLE III: NOT LISTED

TSCA: NOT LISTED

STATE REGULATIONS:

MA SUBSTANCE LIST: LISTED - HYDROGEN PEROXIDE- 2, 4, 5, E, F6

NJ RTK HAZARDOUS SUBSTANCE LIST: LISTED - HYDROGEN PEROXIDE

PA HAZARDOUS SUBSTANCE LIST: LISTED - HYDROGEN PEROXIDE

CANADIAN WHMIS: LISTED - HYDROGEN PEROXIDE 3%

OTHER INFORMATION - SECTION 16

REVISION NUMBER: 1

REVISION DATE: 03/15/05

TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE. HOWEVER, NEITHER WATER-JEL TECHNOLOGIES, NOR ANY OF ITS SUBSIDIARIES ASSUMES ANY LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER. ALL MATERIALS MAY PRESENT UNKNOWN HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.