

MATERIAL SAFETY DATA SHEET

Hydrogen peroxide, 35 wt.% solution in water, stabilized

Section 1 - Chemical Product and Company Identification

MSDS Name:	Hydrogen peroxide, 35 wt.% solution in water, stabilized
Catalog Numbers:	20246-0000, 20246-0010, 20246-0025, 20246-0100, 20246-0250, 20246-0251, 20246-5000
Synonyms:	
Company Identification:	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
7722-84-1	Hydrogen peroxide	35%	231-765-0	O C	34 8
7732-18-5	Water	63-65%	231-791-2		

Text for R-phrases: see Section 16

Hazard Symbols: XN**Risk Phrases:** 22 37/38 41

Section 3 - Hazards Identification

EMERGENCY OVERVIEW*Harmful if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes.***Potential Health Effects**

- Eye:** Contact with the eyes may cause corneal damage. Risk of serious damage to eyes.
- Skin:** Causes redness and pain. Causes severe skin irritation and possible burns. May cause discoloration, erythema (redness), swelling, and the formation of papules and vesicles (blisters).
- Ingestion:** Harmful if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause vascular collapse and damage. May cause damage to the red blood cells.

Inhalation: Causes respiratory tract irritation. May cause ulceration of nasal tissue, insomnia, nervous tremors with numb extremities, chemical pneumonia, unconsciousness, and death.

Chronic: Prolonged or repeated skin contact may cause dermatitis. Repeated contact may cause corneal damage.

Section 4 - First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Wash mouth out with water. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Substance is noncombustible. Use water with caution and in flooding amounts. Oxidizer. Greatly increases the burning rate of combustible materials. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Some oxidizers may react explosively with hydrocarbons(fuel). May decompose explosively when heated or involved in a fire. May accelerate burning if involved in a fire.

Extinguishing Media: Use water only! Do NOT use carbon dioxide. Do NOT use dry chemical. Do NOT get water inside containers. Contact professional fire-fighters immediately. Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Flush spill area with water. Provide ventilation. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Contents may develop pressure upon prolonged storage. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Do not ingest or inhale. Store protected from light. Use only in a chemical fume hood. This product may be under pressure; cool before opening. Discard contaminated shoes. Unused chemicals should not be returned to the container.

Storage: Keep away from heat, sparks, and flame. Do not store near combustible materials. Do not store in direct sunlight. Store in a tightly closed container. Store in a dry area. Keep refrigerated. (Store below 4°C/39°F.)

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use explosion-proof ventilation equipment. 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. Exercise care in cleaning all equipment before use with substance to prevent contamination.

Exposure Limits

CAS# 7722-84-1:

United Kingdom, WEL - TWA: 1 ppm TWA; 1.4 mg/m³ TWA United Kingdom, WEL - STEL: 2 ppm STEL; 2.8 mg/m³ STEL

United States OSHA: 1 ppm TWA; 1.4 mg/m³ TWA

Belgium - TWA: 1 ppm VLE; 1.4 mg/m³ VLE

France - VME: 1 ppm VME; 1.5 mg/m³ VME

Germany: 1 ppm TWA; 1.4 mg/m³ TWA

Malaysia: 1 ppm TWA; 1.4 mg/m³ TWA

Netherlands: 1 ppm MAC; 1.4 mg/m³ MAC

Spain: 1 ppm VLA-ED; 1.4 mg/m³ VLA-ED

CAS# 7732-18-5:

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: colorless - APHA: 10 max

Odor: slight acid odor

pH: 2-4

Vapor Pressure: 3.2kPa @30 deg C

Viscosity: Not available

Boiling Point: 108 deg C @760mmHg (226.40°F)

Freezing/Melting Point: -33 deg C (-27.40°F)

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Decomposition Temperature:

Solubility in water: Miscible

Specific Gravity/Density: 1.135

Molecular Formula: H₂O₂

Molecular Weight: 34

Section 10 - Stability and Reactivity

Chemical Stability: Decomposes slowly to release oxygen. Light sensitive.

Conditions to Avoid: Mechanical shock, incompatible materials, light, ignition sources, exposure to air, excess heat, combustible materials.

Incompatibilities with Other Materials Metals, strong oxidizing agents, reducing agents, acetic acid, acetic anhydride, alcohols, ammonia, brass, bronze, copper, copper alloys, finely powdered metals, galvanized iron, hydrazine, iron, lead oxide, magnesium, nitric acid, sodium carbonate, zinc, potassium, potassium permanganate, sodium, cyanides (e.g. potassium cyanide, sodium cyanide), ethers (e.g. dioxane, furfuran, tetrahydrofuran (THF)), sulfides (inorganic, e.g. ferric sulfide, lead sulfide, sodium sulfide), urea, chlorosulfonic acid, lead dioxide, alkalies, lead, acetone, nitrogen compounds, triethylamine, lime water, silver, iron salts, mercuric oxide, nickel, palladium, organic matter, chromium, manganese, charcoal, glycerol, cellulose, sodium borate, aniline, platinum.

Hazardous Decomposition Products Oxygen, hydrogen gas.

Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 7722-84-1: MX0887000 MX0888000 MX0890000 MX0899000 MX0899500
MX0900000
CAS# 7732-18-5: ZC0110000

LD50/LC50: RTECS:
CAS# 7722-84-1: Draize test, rabbit, eye: 1 mg Severe;
Inhalation, rat: LC50 = 2 gm/m³/4H;
Inhalation, rat: LC50 = 2000 mg/m³;
Oral, mouse: LD50 = 2000 mg/kg;
Oral, rabbit: LD50 = 820 mg/kg;
Oral, rat: LD50 = 1518 mg/kg;
Oral, rat: LD50 = 910 mg/kg;
Oral, rat: LD50 = 376 mg/kg;
Oral, rat: LD50 = 4050 mg/kg;
Skin, rat: LD50 = 3 gm/kg;
Skin, rat: LD50 = 4060 mg/kg;
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RTECS:
CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg;
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Carcinogenicity: Hydrogen peroxide - ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans IARC: Group 3 (not classifiable)
Water - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: 16.4 mg/L; 96H; LC50 (fresh water)
Fish: Fathead Minnow: 5 mg/L; 96H; NOEC (fresh water)
Mollusk Daphnia: 2.4 mg/L; 48H; EC50 (fresh water)
Fish: Channel catfish: 37.4 mg/L; 96H; LC50 (fresh water)

Other: This chemical is not likely to bioconcentrate. Biodegradable.
Fingerling trout, >40 ppm/48H is toxic. Fathead minnow LC50=22-35 gm/L/96H

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA

IMO

RID/ADR

Shipping Name:	HYDROGEN PEROXIDE, AQUEOUS SOLUTION	HYDROGEN PEROXIDE, AQUEOUS SOLUTION	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard Class:	5.1 (8)	5.1 (8)	5.1 (8)
UN Number:	2014	2014	2014
Packing Group:	II	II	II

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

- R 22 Harmful if swallowed.
- R 37/38 Irritating to respiratory system and skin.
- R 41 Risk of serious damage to eyes.

Safety Phrases:

- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 28A After contact with skin, wash immediately with plenty of water.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 7722-84-1: 0

CAS# 7732-18-5: Not available

Canada

CAS# 7722-84-1 is listed on Canada's DSL List

CAS# 7732-18-5 is listed on Canada's DSL List

US Federal

TSCA

CAS# 7722-84-1 is listed on the TSCA Inventory.

CAS# 7732-18-5 is listed on the TSCA Inventory.

Section 16 - Other Information

Text for R-phrases from Section 2

- R 34 Causes burns.
- R 8 Contact with combustible material may cause fire.

MSDS Creation Date: 12/10/1999

Revision #2 Date 4/08/2005

Revisions were made in Sections: General revision.

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