



CHEMICALS

SAFETY DATA SHEET

HYDROGEN PEROXIDE 35% (ALL GRADES)

1. PRODUCT AND COMPANY IDENTIFICATION

Oxygenated and Derivatives

Customer Service Telephone Number: 1-800-346-5757
(Monday through Friday, 8:30 AM to 5:30 PM EST)

Emergency Information

Transportation:

Medical:

RESEARCH PRODUCTS, INC.
6311 HIGHWAY 90 W.
THEODORE, AL. 36590
251-653-0030

Product Information

Product name: HYDROGEN PEROXIDE 35% (ALL GRADES)
Synonyms: H2O2 35%
Molecular formula: H2O2
Chemical family: peroxides
Molecular weight: 34.01 g/mol
Product use: Bleaching agent, Oxidizing agent, Cosmetics, Water treatment

2. HAZARDS IDENTIFICATION

Emergency Overview

Color: colourless
Physical state: liquid
Odor: pungent

***Classification of the substance or mixture:**

Oxidizing liquids, Category 2, H272
Oral: Acute toxicity, Category 4, H302
Serious eye damage, Category 1, H318
Specific target organ toxicity - single exposure, Category 3, H335
Chronic aquatic toxicity, Category 3, H412

*For the full text of the H-Statements mentioned in this Section, see Section 16.

Product code: 04505

Version 3.0

Issued on: 02/10/2015

Page: 1 / 13

SAFETY DATA SHEET

HYDROGEN PEROXIDE 35% (ALL GRADES)

Potential Health Effects:

If swallowed:

May cause: gastrointestinal symptoms, ulceration, burns, accumulation of fluid in the lungs which may be delayed for several hours.(severity of effects depends on extent of exposure).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Wt/Wt	GHS Classification**
Hydrogen peroxide (H2O2)	7722-84-1	35 %	H272, H302, H318, H335, H412
Water	7732-18-5	65 %	Not classified

**For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Inhalation:

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin:

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Ingestion:

If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. Rinse mouth.

Notes to physician:

Exposure to material may cause delayed lung injury resulting in pulmonary edema and pneumonitis. Exposed individuals should be monitored for 72 hours after exposure for the onset of delayed respiratory symptoms.

5. FIREFIGHTING MEASURES

Extinguishing media (suitable):
water spray, water fog

Product code: 04505

Version 3.0

Issued on: 02/10/2015

Page: 3 / 13

SAFETY DATA SHEET

HYDROGEN PEROXIDE 35% (ALL GRADES)

Storage**General information on storage conditions:**

Store in tightly closed container. Store in cool, dry, well ventilated area away from sources of ignition such as flame, sparks and static electricity. Store out of direct sunlight in a cool well-ventilated place. Store in original container. Store away from combustibles and incompatible materials. Refer to National Fire Protection Association (NFPA) 430, Code for the Storage of Solid and Liquid Oxidizers.

Storage Incompatibility – General:

Store separate from acids, alkalies, reducing agents, and combustibles. Store separate from:

Organic materials

Metallic oxides

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Airborne Exposure Guidelines:****HYDROGEN PEROXIDE (7722-84-1)****US. ACGIH Threshold Limit Values**

Time weighted average 1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1003)

PEL 1 ppm (1.4 mg/m³)

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

Engineering controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Respiratory protection:

Avoid breathing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Skin protection:

Product code: 04505

Version 3.0

Issued on: 02/10/2015

Page: 5 / 13

SAFETY DATA SHEET

HYDROGEN PEROXIDE 35% (ALL GRADES)

Relative vapor density:	1.0
Vapor density:	not determined
Boiling point/boiling range:	226 °F (108 °C)
Freezing point:	-27 °F (-33 °C)
Evaporation rate:	No data available
Solubility in water:	completely soluble
% Volatiles:	100 %
Molecular weight:	34.01 g/mol
Oil/water partition coefficient:	Not applicable
Thermal decomposition	No data available
Flammability:	See GHS Classification in Section 2

10. STABILITY AND REACTIVITY

Stability:
This material is chemically stable under normal and anticipated storage, handling and processing conditions.

Materials to avoid:
Metals
Organic materials
Reducing agents
Metallic oxides
Dusts
Combustible materials (e.g., wood, sawdust)
Alkaline materials

Conditions / hazards to avoid:
Material decomposes with the potential to produce a rupture of unvented closed containers.

Hazardous decomposition products:
This material decomposes if contaminated, causing fire and possible explosions. Oxygen can be liberated at temperatures above ambient.

11. TOXICOLOGICAL INFORMATION

Product code: 04505

Version 3.0

Issued on: 02/10/2015

Page: 7 / 13

SAFETY DATA SHEET

HYDROGEN PEROXIDE 35% (ALL GRADES)

Throat: irritation. (based on reports of occupational exposure to workers)

Human experience

Skin contact:

Skin: bleaching of hair. (based on reports of occupational exposure to workers)

Human experience

Eye contact:

Eye: irritating. (based on reports of occupational exposure to workers)

Human experience

Ingestion:

Gastrointestinal tract: bloating, ulceration, burns. (accidental exposure to concentrated solutions)

Lung: accumulation of fluid in the lungs, death. (severity of effects depends on extent of exposure)

12. ECOLOGICAL INFORMATION

Chemical Fate and Pathway

Data on this material and/or a similar material are summarized below.

Data for HYDROGEN PEROXIDE (7722-84-1)

Biodegradation:

Readily biodegradable. (0.02 d) biodegradation 99 %

Octanol Water Partition Coefficient:

log Pow = -1.57 (calculated)

Ecotoxicology

Data on this material and/or a similar material are summarized below.

Data for HYDROGEN PEROXIDE (7722-84-1)

Aquatic toxicity data:

Harmful. Pimephales promelas (fathead minnow) 96 h LC50 = 16.4 mg/l

Aquatic Invertebrates:

Toxic. Daphnia pulex (Water flea) 48 h EC50 = 2.4 mg/l

Algae:

Toxic. Skeletonema costatum 72 h ErC50 = 1.38 mg/l

Microorganisms:

Activated sludge 0.5 h EC50 = 466 mg/l

Activated sludge 3 h EC50 > 1,000 mg/l

Chronic toxicity to aquatic invertebrates:

Harmful. Daphnia magna (Water flea) 21 d NOEC (reproduction) = 0.63 mg/l

Product code: 04505

Version 3.0

Issued on: 02/10/2015

Page: 9 / 13

SAFETY DATA SHEET

HYDROGEN PEROXIDE 35% (ALL GRADES)

Japan, ISHL - Inventory of Chemical Substances	ISHL (JP)	Does not conform
Korea, Korean Existing Chemicals Inventory (KECI)	KECI (KR)	Conforms to
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	Does not conform
Australia Inventory of Chemical Substances (AICS)	AICS	Conforms to

United States – Federal Regulations

SARA Title III – Section 302 Extremely Hazardous Chemicals:

Chemical Name	CAS-No.	SARA Reportable Quantities	SARA Threshold Planning Quantity
HYDROGEN PEROXIDE	7722-84-1	1000 lbs	1000 lbs

SARA Title III - Section 311/312 Hazard Categories:
Acute Health Hazard, Fire Hazard, Reactivity Hazard

SARA Title III – Section 313 Toxic Chemicals:
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantity (RQ):

The components in this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.

United States – State Regulations

New Jersey Right to Know

Chemical Name	CAS-No.
Water	7732-18-5
HYDROGEN PEROXIDE	7722-84-1

Product code: 04505

Version 3.0

Issued on: 02/10/2015

Page: 11 / 13

SAFETY DATA SHEET

HYDROGEN PEROXIDE 35% (ALL GRADES)

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Product code: 04505

Version 3.0

Issued on: 02/10/2015

Page: 13 / 13