

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name :	HYDROGEN PEROXIDE 34% TECH GRADE
Recommended use of the chemical	and restrictions on use
	Oxidizing agent.
Manufacturer or supplier's details	
Company :	BVV
Address	1251 Frontenac Rd. Suite 150
	Naperville, IL 60563
Emergency telephone number:	
	CHEMTEL (1-800-255-3924)
Additional Information:	Responsible Party: Product Support E-mail: support@shopbvv.com SDS Requests: 1-331-281-0154 Website: www.shopbvv.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Oxidizing liquids	:	Category 3
Acute toxicity (Oral)	:	Category 4
Serious eye damage	:	Category 1
Specific target organ toxicity - single exposure	:	Category 3 (Respiratory system)
GHS label elements Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H272 May intensify fire; oxidizer. H302 Harmful if swallowed. H318 Causes serious eye damage. H335 May cause respiratory irritation.
Precautionary statements	:	Prevention: P210 Keep away from heat. P220 Keep/ Store away from clothing/ combustible materials. P221 Take any precaution to avoid mixing with combustibles. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection.



 Response: P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P370 + P378 In case of fire: Use dry sand, dry chemical or alco- hol-resistant foam to extinguish. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste dis- posal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent	
7722-84-1	Hydrogen peroxide (H2O2)	25 - 34	
Actual concentration is withheld as a trade secret			

Any Concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice	: Consult a physician. Do not leave the victim unattended.
If inhaled	: If symptoms persist, call a physician.
In case of skin contact	: Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficul- ty.
	If on skin, rinse well with water.
In case of eye contact	 Take victim immediately to hospital. Small amounts splashed into eyes can cause irreversible tis- sue damage and blindness.
	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital.
If swallowed	 Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.



SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire- fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion prod- ucts	:	No hazardous combustion products are known
Specific extinguishing meth- ods Further information		Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored sepa- rately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if nec- essary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	 Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentra- tions. Vapours can accumulate in low areas.
Environmental precautions	 Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Neutralize with chalk, alkali solution or ammonia. Contain spillage, and then collect with non-combustible ab- sorbent material, (e.g. sand, earth, diatomaceous earth, ver- miculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on protection against	:	Do not spray on a naked flame or any incandescent material.
fire and explosion		Take necessary action to avoid static electricity discharge
		(which might cause ignition of organic vapours). Use only
		explosion-proof equipment. Keep away from open flames, hot



	surfaces and sources of ignition. Keep away from combustible material.
Advice on safe handling	 Avoid formation of aerosol. Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage Materials to avoid	 Prevent unauthorized access. No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
7722-84-1	Hydrogen peroxide (H2O2)	TWA	1 ppm	ACGIH
		TWA	1 ppm 1.4 mg/m3	NIOSH REL
		TWA	1 ppm 1.4 mg/m3	OSHA Z-1
		TWA	1 ppm 1.4 mg/m3	OSHA P0
		PEL	1 ppm 1.4 mg/m3 (H2O2)	CAL PEL

Personal protective equipment

Respiratory protection	:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Hand protection		
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles



Skin and body protection	 Wear face-shield and protective suit for abnormal processing problems. Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	 When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colour Odour Odour Threshold pH	: liquid : colourless : odorless : No data available : 2 - 4 @ 20 °C (68 °F)
Freezing Point (Melting point/freezing point) Boiling Point (Boiling point/boiling range) Flash point	 : -27 °C (-17 °F) : 106 °C (223 °F) : does not flash
Evaporation rate Flammability (solid, gas) Upper explosion limit	
Lower explosion limit	: No data available
Vapour pressure Relative vapour density Relative density	 17.4 - 25 mmHg No data available 1.12 @ 20 - 25 °C (68 - 77 °F) Reference substance: (water = 1)
Density Solubility(ies) Water solubility Solubility in other solvents Partition coefficient: n- octanol/water Auto-ignition temperature	No data availableNo data available
Thermal decomposition Viscosity Viscosity, dynamic Oxidizing properties	

SECTION 10. STABILITY AND REACTIVITY

Reactivity

: No dangerous reaction known under conditions of normal use.



Chemical stability Possibility of hazardous reac- tions	 Stable under normal conditions. Product will not undergo hazardous polymerization. Stable under recommended storage conditions.
Conditions to avoid Incompatible materials	 Heat, flames and sparks. Reducing agents Bases Alcohols Flammable materials organic solvent Metals

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: 1,471 mg/kg

Components:

7722-84-1: Acute oral toxicity

: LD50 (Rat, male and female): 1,193 mg/kg Assessment: The component/mixture is moderately toxic after single ingestion.

Skin corrosion/irritation

Product:

Remarks: Extremely corrosive and destructive to tissue.

Components:

7722-84-1: Species: Rabbit Exposure time: 4 h Result: Causes severe burns.

Serious eye damage/eye irritation

Product: Remarks: May cause irreversible eye damage.

Components:

7722-84-1: Species: Rabbit Result: Risk of serious damage to eyes. Exposure time: 20 s Test substance: Hydrogen peroxide



Carcinogenicity IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	
Components: 7722-84-1: Effects on foetal develop- ment	: Species: Rat Application Route: Oral Dose: 0, 0.02, 0.1, 2, 10 %diet Duration of Single Treatment: 7 d Teratogenicity: NOAEL: 0.02 % diet Developmental Toxicity: NOAEL: 0.02 % diet Symptoms: Skeletal malformations, Reduced number of viable fetuses Result: Embryotoxic effects and adverse effects on the off- spring were detected.

STOT - single exposure

Components:

7722-84-1:

Target Organs: Respiratory system Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Further information

Product:

Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

7722-84-1: Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia pulex (Water flea)): 2.4 mg/l Exposure time: 48 h Test Type: semi-static test Test substance: hydrogen peroxide	<u>Components:</u>		
aquatic invertebrates Exposure time: 48 h Test Type: semi-static test	7722-84-1:		
	, i	:	Exposure time: 48 h Test Type: semi-static test



Toxicity to algae	EC50 (Skeletonema costatum (marine diatom)): 1.38 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test Test substance: hydrogen peroxide	I
Chronic aquatic toxicity- As- sessment	Harmful to aquatic life with long lasting effects.	
Persistence and degradability		
No data available		
Bioaccumulative potential		
No data available		
Mobility in soil No data available		
Other adverse effects		
Product:		
Ozone-Depletion Potential	Regulation: 40 CFR Protection of Environment; Part 82 Pr tection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufac tured with a Class I or Class II ODS as defined by the U.S Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +	;- 5.
Additional ecological infor- mation	An environmental hazard cannot be excluded in the event unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.	: of

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods Waste from residues	: Dispose of in accordance with all applicable local, state and federal regulations.
	Dispose of in accordance with all applicable local, state and federal regulations.
Contaminated packaging	 The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.



Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

UN2014, Hydrogen peroxide, aqueous solutions, 5.1 (8), II

IATA (International Air Transport Association):

UN2014, Hydrogen peroxide, aqueous solution, 5.1 (8), II

IMDG (International Maritime Dangerous Goods):

UN2014, HYDROGEN PEROXIDE, AQUEOUS SOLUTION, 5.1, (8), II

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)		
Hydrogen peroxide (H2O2)	7722-84-1	1000	2941		
SARA 311/312 Hazards	: Oxidiser (liquid, solid or gas) Acute toxicity (any route of exposure) Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure)				
SARA 302	:				
SARA 313	 7722-84-1 Hydrogen peroxide (H2O2) 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, Sec- tion 313. 				

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

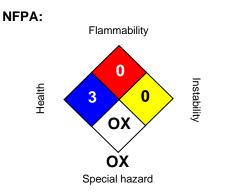
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.



This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3. This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain a		ury	toxic polititants listed under the 0.5. Clean water Act Section	
	Massachusetts	•	w	
		7722-84-1		Hydrogen peroxide (H2O2)
	Pennsylvania I	-		
		7732-18-5		Water
		7722-84-1		Hydrogen peroxide (H2O2)
	California Prop	o 65	:	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other re- productive harm.
	The componer	nts of this prod	uc	t are reported in the following inventories:
	TSCA		:	On TSCA Inventory
	DSL		:	All components of this product are on the Canadian DSL
	AICS		:	On the inventory, or in compliance with the inventory
	NZIoC		:	On the inventory, or in compliance with the inventory
	ENCS		:	On the inventory, or in compliance with the inventory
	KECI		:	On the inventory, or in compliance with the inventory
	PICCS		:	On the inventory, or in compliance with the inventory
	IECSC		:	On the inventory, or in compliance with the inventory

SECTION16. OTHER INFORMATION



HMIS III:



0 = not significant, 1 =Slight,

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2 = Moderate, 3 = High
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4 =Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become



available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by BVV Product Engineering Department.

Revision Date

: 08/29/2023

Key or legend to abbreviations and acronyms used in the safety data sheet						
ACGIH	American Conference of Govern- ment Industrial Hygienists	LD50	Lethal Dose 50%			
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level			
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency			
NDSL	Canada, Non-Domestic Substanc- es List	NIOSH	National Institute for Occupational Safety & Health			
CNS	Central Nervous System	NTP	National Toxicology Program			
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemi- cals			
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level			
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration			
EGEST	EOSCA Generic Exposure Scenar- io Tool	OSHA	Occupational Safety & Health Administration			
EOSCA	European Oilfield Specialty Chem- icals Association	PEL	Permissible Exposure Limit			
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commer- cial Chemical Substances			
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic			
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act			
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit			
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.			
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value			
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average			
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act			
KECI			Unknown or Variable Composi- tion, Complex Reaction Products, and Biological Materials			
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System			
LC50	Lethal Concentration 50%					