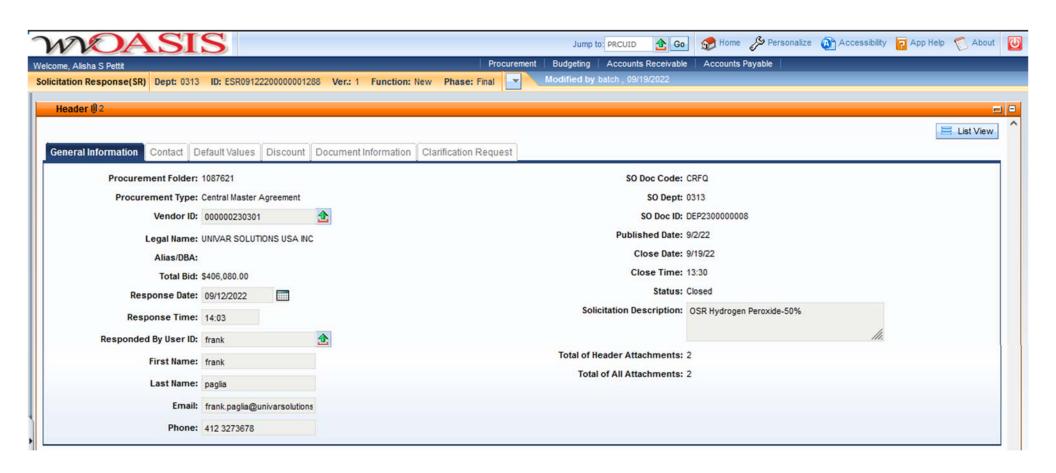


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

# State of West Virginia Solicitation Response

Proc Folder: 1087621

Solicitation Description: OSR Hydrogen Peroxide-50%

Proc Type: Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2022-09-19 13:30	SR 0313 ESR09122200000001288	1

**VENDOR** 

000000230301

UNIVAR SOLUTIONS USA INC

Solicitation Number: CRFQ 0313 DEP2300000008

**Total Bid:** 406080 **Response Date:** 2022-09-12 **Response Time:** 14:03:09

Comments:

FOR INFORMATION CONTACT THE BUYER

Joseph E Hager III (304) 558-2306 joseph.e.hageriii@wv.gov

Vendor Signature X

FEIN# DATE

All offers subject to all terms and conditions contained in this solicitation

 Date Printed:
 Sep 19, 2022
 Page: 1
 FORM ID: WV-PRC-SR-001 2020/05

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	OSR Peroxide-50%	1128000.0	) LB	0.360000	406080.00

Comm Code	Manufacturer	Specification	Model #	
51473503				

**Commodity Line Comments:** Pricing is Firm for One Year Pricing includes freight and is a delivered price.

**Extended Description:** 

Quantities are estimated and for bid purposes only.



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

#### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Hydrogen peroxide 50% Tech Grade

Recommended use of the chemical and restrictions on use

Recommended use : Oxidizing agents

Bleaching aid.

Water treatment chemical

Manufacturer or supplier's details

Company : Univar Solutions USA, Inc.

**Address** 3075 Highland Pkwy Suite 200

Downers Grove, IL 60515 United States of America (USA)

**Emergency telephone number:** 

Transport North America: CHEMTREC (1-800-424-9300) CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department

E-mail: SDSNA@univarsolutions.com SDS Requests: 1-855-429-2661 Website: www.univarsolutions.com

### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Oxidizing liquids : Category 1

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion : Category 1A

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 : H271 May cause fire or explosion; strong oxidizer.

H302 + H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

SDS Number: 100000009686 1 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

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/ protective clothing/ eye protection/ face protection.

P283 Wear fire/ flame resistant/ retardant clothing.

#### Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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.

P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

## 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 disposal 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)	40 - 60

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

SDS Number: 100000009686 2 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

#### **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : Call a physician or poison control centre immediately.

If unconscious, place in recovery position and seek medical

advice.

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. If on clothes, remove clothes.

In case of eye contact : 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.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing. Take victim immediately to hospital.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Keep respiratory tract clear. Do NOT induce vomiting.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray

Unsuitable extinguishing

media

: High volume water jet

Foam

Carbon dioxide (CO2)

Dry chemical

Specific hazards during fire-

fighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod- : No hazardous combustion products are known

SDS Number: 100000009686 3 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

ucts

Specific extinguishing meth-

ods

: Use a water spray to cool fully closed containers.

Further information : 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.

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if nec-

essary.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency procedures

Personal precautions, protec- : Use personal protective equipment.

Ensure adequate ventilation.

Evacuate personnel to safe 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

: Contain spillage, and then collect with non-combustible absorbent 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

fire and explosion

: Keep away from combustible material.

Advice on safe handling : Avoid formation of aerosol.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Provide sufficient air exchange and/or exhaust in work rooms. 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 : Prevent unauthorized access.

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

SDS Number: 100000009686 4 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.

Materials to avoid : 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 parameters / 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

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

In the case of vapour formation use a respirator with an ap-

proved filter.

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

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : Impervious clothing

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Hygiene measures : Avoid contact with skin, eyes and clothing.

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and immediately after handling the

product.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

SDS Number: 100000009686 5 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

Colour : clear, colourless

Odour : pungent

Odour Threshold : No data available

pH : < 2 @ 20 °C (68 °F)

Freezing Point (Melting point/freezing point)

: -52 - -17 °C (-62 - 1 °F)

Boiling Point (Boiling point/boiling range)

: 114 °C (237 °F)

Flash point : Not applicable

Evaporation rate : > 1

(Butyl Acetate = 1)

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 18 mmHg @ 20 °C (68 °F)

Relative vapour density : 1(Air = 1.0)

Relative density : 1.13Reference substance: (water = 1)

Density : 1.196 g/cm3 @ 20 °C (68 °F)

Solubility(ies)

Water solubility : completely soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available

Thermal decomposition : No data available

Oxidizing properties : May cause fire or explosion; strong oxidizer.

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Explosive; fire, blast or projection hazard.

May cause or intensify fire; oxidizer.

SDS Number: 100000009686 6 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

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Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

: Potential for exothermic hazard

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Alkalis

Combustible material Flammable materials

Metals metal oxides Organic materials Reducing agents

Hazardous decomposition

products

: Oxygen

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 833.33 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 18.33 mg/l

Exposure time: 4 h
Test atmosphere: vapour

**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:** 

Result: Causes severe burns.

**Components:** 

**7722-84-1:** Species: Rabbit Exposure time: 4 h

Result: Causes severe burns.

### Serious eye damage/eye irritation

**Product:** 

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## Hydrogen peroxide 50% Tech Grade

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Remarks: Risk of serious damage to eyes.

**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.

ACGIH Confirmed animal carcinogen with unknown relevance to hu-

mans

7722-84-1 Hydrogen peroxide (H2O2)

### 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.

# Aspiration toxicity

#### **Product:**

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## Hydrogen peroxide 50% Tech Grade

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Corrosive to the respiratory tract.

**Further information** 

**Product:** 

Remarks: No data available

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

### Components:

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

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

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 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured 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 + B).

Additional ecological infor-

mation

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

SDS Number: 100000009686 9 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

Toxic to aquatic life with long lasting effects.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Dispose of in accordance with all applicable local, state and

federal regulations.

For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Uni-

var Solutions ChemCare: 1-800-909-4897

Contaminated packaging : 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

**IMDG** (International Maritime Dangerous Goods):

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

### **SECTION 15. REGULATORY INFORMATION**

WHMIS Classification : C: Oxidizing Material

D1B: Toxic Material Causing Immediate and Serious Toxic

**Effects** 

D2B: Toxic Material Causing Other Toxic Effects

E: Corrosive Material

### **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

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting re-

quirements of SARA Title III, Section 302.



## Hydrogen peroxide 50% Tech Grade

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SARA 313 : 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.

#### 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

### **US State Regulations**

#### **Massachusetts Right To Know**

7722-84-1	Hydrogen peroxide (H2O2)	40 - 60 %
Pennsylvania Right To Know		
7722-84-1	Hydrogen peroxide (H2O2)	40 - 60 %
7732-18-5	Water	40 - 60 %
New Jersey Right To Know		
7722-84-1	Hydrogen peroxide (H2O2)	40 - 60 %
7732-18-5	Water	40 - 60 %

California Prop 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 components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

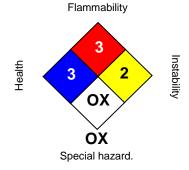


## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

#### **SECTION16. OTHER INFORMATION**

#### NFPA:



### HMIS III:

HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 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 Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

**Revision Date** : 09/02/2019

**Legacy SDS:** : R0004057

### Material number:

56274, 55395, 88109, 57093, 55397, 167274, 104491, 70218

Key or le	Key or legend to abbreviations and acronyms used in the safety data sheet				
ACGIH	American Conference of Government 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 Substances 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 Chemicals		
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level		
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration		
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration		

SDS Number: 100000009686 12 / 13 Hydrogen peroxide 50% Tech Grade



## Safety Data Sheet Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial 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	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

#### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Hydrogen peroxide 50% Tech Grade

Recommended use of the chemical and restrictions on use

Recommended use : Oxidizing agents

Bleaching aid.

Water treatment chemical

Manufacturer or supplier's details

Company : Univar Solutions USA, Inc.

**Address** 3075 Highland Pkwy Suite 200

Downers Grove, IL 60515 United States of America (USA)

**Emergency telephone number:** 

Transport North America: CHEMTREC (1-800-424-9300) CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department

E-mail: SDSNA@univarsolutions.com SDS Requests: 1-855-429-2661 Website: www.univarsolutions.com

### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Oxidizing liquids : Category 1

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion : Category 1A

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 : H271 May cause fire or explosion; strong oxidizer.

H302 + H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

SDS Number: 100000009686 1 / 13 Hydrogen peroxide 50% Tech Grade



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

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/ protective clothing/ eye protection/ face protection.

P283 Wear fire/ flame resistant/ retardant clothing.

#### Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

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.

P306 + P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P371 + P380 + P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

## 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 disposal 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)	40 - 60

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



## Hydrogen peroxide 50% Tech Grade

Version 1.2 Revision Date: 09/02/2019

#### **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : Call a physician or poison control centre immediately.

If unconscious, place in recovery position and seek medical

advice.

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. If on clothes, remove clothes.

In case of eye contact : 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.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing. Take victim immediately to hospital.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Keep respiratory tract clear. Do NOT induce vomiting.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician. Take victim immediately to hospital.

### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Water spray

Unsuitable extinguishing

media

: High volume water jet

Foam

Carbon dioxide (CO2)

Dry chemical

Specific hazards during fire-

fighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod- : No hazardous combustion products are known

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ucts

Specific extinguishing meth-

ods

: Use a water spray to cool fully closed containers.

Further information : 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.

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if nec-

essary.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency procedures

Personal precautions, protec- : Use personal protective equipment.

Ensure adequate ventilation.

Evacuate personnel to safe 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

: Contain spillage, and then collect with non-combustible absorbent 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

fire and explosion

: Keep away from combustible material.

Advice on safe handling : Avoid formation of aerosol.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Provide sufficient air exchange and/or exhaust in work rooms. 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 : Prevent unauthorized access.

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

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kept upright to prevent leakage. Observe label precautions.

Electrical installations / working materials must comply with

the technological safety standards.

Materials to avoid : 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 parameters / 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

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

In the case of vapour formation use a respirator with an ap-

proved filter.

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

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : Impervious clothing

Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Hygiene measures : Avoid contact with skin, eyes and clothing.

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and immediately after handling the

product.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

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Colour : clear, colourless

Odour : pungent

Odour Threshold : No data available

pH : < 2 @ 20 °C (68 °F)

Freezing Point (Melting point/freezing point)

: -52 - -17 °C (-62 - 1 °F)

Boiling Point (Boiling point/boiling range)

: 114 °C (237 °F)

Flash point : Not applicable

Evaporation rate : > 1

(Butyl Acetate = 1)

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 18 mmHg @ 20 °C (68 °F)

Relative vapour density : 1(Air = 1.0)

Relative density : 1.13Reference substance: (water = 1)

Density : 1.196 g/cm3 @ 20 °C (68 °F)

Solubility(ies)

Water solubility : completely soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available

Thermal decomposition : No data available

Oxidizing properties : May cause fire or explosion; strong oxidizer.

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Explosive; fire, blast or projection hazard.

May cause or intensify fire; oxidizer.

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Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

: Potential for exothermic hazard

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Alkalis

Combustible material Flammable materials

Metals metal oxides Organic materials Reducing agents

Hazardous decomposition

products

: Oxygen

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

**Product:** 

Acute oral toxicity : Acute toxicity estimate: 833.33 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 18.33 mg/l

Exposure time: 4 h
Test atmosphere: vapour

**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:** 

Result: Causes severe burns.

**Components:** 

7722-84-1: Species: Rabbit

Exposure time: 4 h

Result: Causes severe burns.

### Serious eye damage/eye irritation

**Product:** 

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Remarks: Risk of serious damage to eyes.

**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.

ACGIH Confirmed animal carcinogen with unknown relevance to hu-

mans

7722-84-1 Hydrogen peroxide (H2O2)

### 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.

#### **Aspiration toxicity**

#### **Product:**

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Corrosive to the respiratory tract.

**Further information** 

**Product:** 

Remarks: No data available

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

### Components:

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

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

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 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured 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 + B).

Additional ecological infor-

mation

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

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Toxic to aquatic life with long lasting effects.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Dispose of in accordance with all applicable local, state and

federal regulations.

For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Uni-

var Solutions ChemCare: 1-800-909-4897

Contaminated packaging : 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

**IMDG** (International Maritime Dangerous Goods):

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

### **SECTION 15. REGULATORY INFORMATION**

WHMIS Classification : C: Oxidizing Material

D1B: Toxic Material Causing Immediate and Serious Toxic

**Effects** 

D2B: Toxic Material Causing Other Toxic Effects

E: Corrosive Material

### **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

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting re-

quirements of SARA Title III, Section 302.

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SARA 313 : 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.

#### 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

### **US State Regulations**

#### **Massachusetts Right To Know**

7722-84-1	Hydrogen peroxide (H2O2)	40 - 60 %
Pennsylvania Right To Know		
7722-84-1	Hydrogen peroxide (H2O2)	40 - 60 %
7732-18-5	Water	40 - 60 %
New Jersey Right To Know		
7722-84-1	Hydrogen peroxide (H2O2)	40 - 60 %
7732-18-5	Water	40 - 60 %

California Prop 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 components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL

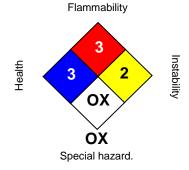


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#### **SECTION16. OTHER INFORMATION**

#### NFPA:



### HMIS III:

HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 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 Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

**Revision Date** : 09/02/2019

**Legacy SDS:** : R0004057

### Material number:

56274, 55395, 88109, 57093, 55397, 167274, 104491, 70218

Key or legend to abbreviations and acronyms used in the safety data sheet				
ACGIH	American Conference of Government 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 Substances 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 Chemicals	
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level	
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration	
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration	

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EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial 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	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		