

Revision date: 05-01-2014

# SAFETY DATA SHEET

## 1. Identification

Product identifier: HYDROGEN PEROXIDE SOLUTION 3%

Other means of identification Product No.: 2182, 2180, 5232

Recommended use and restriction on use

Recommended use: Not available. Restrictions on use: Not known.

### Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Avantor Performance Materials, Inc. Company Name: Address: 3477 Corporate Parkway, Suite 200

Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: **Environmental Health & Safety** info@avantormaterials.com e-mail:

**Emergency telephone number:** 

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

# 2. Hazard(s) identification

### Hazard classification

**Health hazards** 

Serious eye damage/eye irritation Category 2A

Label elements

**Hazard symbol:** No symbol

Signal word: Warning

**Hazard statement:** Causes serious eye irritation.

**Precautionary statement** 

Prevention: Wash thoroughly after handling. Wear eye protection/face protection.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation

persists: Get medical advice/attention.

Other hazards which do not

result in GHS classification:

None.

# 3. Composition/information on ingredients



Revision date: 05-01-2014

#### **Mixtures**

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
HYDROGEN PEROXIDE		7722-84-1	2 - 4%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

**Ingestion:** Rinse mouth thoroughly. Get medical attention if symptoms occur.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation

persists after washing. Wash contaminated clothing before reuse.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

**Symptoms:** May cause irritation to skin, eyes, and respiratory tract.

Indication of immediate medical attention and special treatment needed

**Treat symptomatically.** Symptoms may be delayed.

### 5. Fire-fighting measures

**General fire hazards:** The product is non-combustible.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

### 6. Accidental release measures



Revision date: 05-01-2014

Personal precautions, protective equipment and emergency procedures:

Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and material for

containment and cleaning

up:

Absorb spill with vermiculite or other inert material, then place in a container

for chemical waste. Clean surface thoroughly to remove residual

contamination.

**Notification Procedures:** Inform authorities if large amounts are involved. Prevent runoff from

entering drains, sewers, or streams.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Avoid discharge into

drains, water courses or onto the ground.

# 7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Avoid contact with eyes,

skin, and clothing. Avoid breathing mist or vapor. Wash hands thoroughly

after handling.

Conditions for safe storage,

including any incompatibilities: Keep container tightly closed. Store in a cool, dry place. Store in a well-

ventilated place.

### 8. Exposure controls/personal protection

### **Control parameters**

Occupational exposure limits

Chemical identity	Туре	Exposure Limit values	Source
HYDROGEN PEROXIDE	TWA	1 ppm	US. ACGIH Threshold Limit Values (2011)
	REL	1 ppm 1.4 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	1 ppm 1.4 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	1 ppm 1.4 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate engineering controls

No data available.

### Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

> Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash

facilities.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection: Wear protective gloves.

Wear suitable protective clothing. Other:

**Respiratory protection:** In case of inadequate ventilation use suitable respirator.



Revision date: 05-01-2014

**Hygiene measures:** Provide eyewash station and safety shower. Always observe good personal

hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

### 9. Physical and chemical properties

**Appearance** 

Physical state: Liquid
Form: Liquid
Color: Colorless
Odor: Odorless

Odor threshold: No data available. PH: No data available.

Melting point/freezing point: 0 °C Initial boiling point and boiling range: 100 °C

Flash Point:

Evaporation rate:

No data available.

No data available.

No data available.

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

No data available.

Explosive limit - lower (%):

No data available.

Vapor pressure: 0.02 kPa

Vapor density:No data available.Relative density:1.01 (20 °C)

Solubility(ies)

Solubility in water: Soluble

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available.

No data available.

No data available.

No data available.

### 10. Stability and reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

**Conditions to avoid:** Contact with incompatible materials. Excessive heat.

**Incompatible materials:** Strong oxidizing agents. Strong reducing agents. Organic compounds.

Hazardous decomposition

products:

None known.

# 11. Toxicological information

# Information on likely routes of exposure

**Ingestion:** May cause irritation of the gastrointestinal tract.



Revision date: 05-01-2014

**Inhalation:** Spray mists may cause respiratory tract irritation.

**Skin contact:** May cause irritation.

**Eye contact:** Causes serious eye irritation.

### Information on toxicological effects

### Acute toxicity (list all possible routes of exposure)

Oral

**Product:** No data available.

**Dermal** 

**Product:** No data available.

Inhalation

**Product:** No data available.

Repeated dose toxicity

**Product:** No data available.

Skin corrosion/irritation

**Product:** May cause skin irritation.

Serious eye damage/eye irritation

**Product:** Causes serious eye irritation.

Respiratory or skin sensitization

**Product:** Not a skin sensitizer.

Carcinogenicity

**Product:** This substance has no evidence of carcinogenic properties.

### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

### **US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

# Germ cell mutagenicity

In vitro

**Product:** No mutagenic components identified

In vivo

**Product:** No mutagenic components identified

Reproductive toxicity

**Product:** No components toxic to reproduction

Specific target organ toxicity - single exposure

**Product:** No data available.

Specific target organ toxicity - repeated exposure

**Product:** No data available.

**Aspiration hazard** 

**Product:** Not classified



Revision date: 05-01-2014

Other effects: None known.

### 12. Ecological information

### **Ecotoxicity:**

Acute hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

Specified substance(s):

HYDROGEN PEROXIDE LC 50 (Chameleon goby (Tridentiger trigonocephalus), 24 h): 155 mg/l

Mortality

LC 50 (Jack Mackerel (Trachurus japonicus), 24 h): 89 mg/l Mortality

**Aquatic invertebrates** 

**Product:** No data available.

Chronic hazards to the aquatic environment:

Fish

**Product:** No data available.

Aquatic invertebrates

**Product:** No data available.

**Toxicity to Aquatic Plants** 

**Product:** No data available.

Persistence and degradability

Biodegradation

**Product:** There are no data on the degradability of this product.

**BOD/COD** ratio

**Product:** No data available.

Bioaccumulative potential

**Bioconcentration factor (BCF)** 

**Product:** No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)
Product:
No data available.

**Mobility in soil:** No data available.

Other adverse effects: Not expected to be harmful to aquatic organisms.

13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws. Since emptied containers retain product residue, follow label warnings

even after container is emptied.

**Contaminated packaging:** Since emptied containers retain product residue, follow label warnings even

after container is emptied.



Revision date: 05-01-2014

14. Transport information
DOT
Not regulated.
IMDG
Not regulated.
IATA
Not regulated.
15. Regulatory information
US federal regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.
CERCLA Hazardous Substance List (40 CFR 302.4): PHENACETIN Reportable quantity: 100 lbs.
Superfund amendments and reauthorization act of 1986 (SARA)
Hazard categories
X Acute (Immediate) X Chronic (Delayed) Fire Reactive Pressure Generating
SARA 302 Extremely hazardous substance Chemical identity RQ Threshold Planning Quantity
HYDROGEN PEROXIDE 1000 lbs. 1000 lbs.
SARA 304 Emergency release notification
Chemical identity RQ
HYDROGEN PEROXIDE PHENACETIN 100 lbs.
THE WOLLING
SARA 311/312 Hazardous chemical
Chemical identity Threshold Planning Quantity HYDROGEN PEROXIDE 500lbs
SARA 313 (TRI reporting)  None present or none present in regulated quantities.
Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):  None present or none present in regulated quantities.
US state regulations
US. California Proposition 65 PHENACETIN Carcinogenic.
US. New Jersey Worker and Community Right-to-Know Act HYDROGEN PEROXIDE Listed



On or in compliance with the inventory

Revision date: 05-01-2014

### US. Massachusetts RTK - Substance List

HYDROGEN PEROXIDE Listed PHENACETIN Listed

### US. Pennsylvania RTK - Hazardous Substances

HYDROGEN PEROXIDE Listed

**US. Rhode Island RTK** 

HYDROGEN PEROXIDE Listed

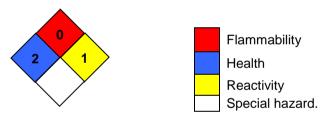
### **Inventory Status:**

Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory EINECS, ELINCS or NLP: On or in compliance with the inventory Japan (ENCS) List: On or in compliance with the inventory China Inv. Existing Chemical Substances: Not in compliance with the inventory. Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Canada NDSL Inventory: Not in compliance with the inventory. On or in compliance with the inventory Philippines PICCS: On or in compliance with the inventory **US TSCA Inventory:** On or in compliance with the inventory New Zealand Inventory of Chemicals: Not in compliance with the inventory. Japan ISHL Listing:

Japan Pharmacopoeia Listing:

# 16.Other information, including date of preparation or last revision

### **NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Issue date:** 05-01-2014

**Revision date:** No data available.

Version #: 1.0

Further information: No data available.



Revision date: 05-01-2014

### Disclaimer:

THE INFORMATION PRESENTED IN THIS MATERIAL SAFETY DATA SHEET (MSDS/SDS) WAS PREPARED BY TECHNICAL PERSONNEL BASED ON DATA THAT THEY BELIEVE IN THEIR GOOD FAITH JUDGMENT IS ACCURATE. HOWEVER, THE INFORMATION PROVIDED HEREIN IS PROVIDED "AS IS," AND AVANTOR PERFORMANCE MATERIALS MAKES AND GIVES NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, AND EXPRESSLY DISCLAIMS ALL WARRANTIES REGARDING SUCH INFORMATION AND THE PRODUCT TO WHICH IT RELATES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION, WARRANTIES OF ACCURACY, COMPLETENESS, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY, STABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE. OR USAGE OF TRADE. THIS MSDS/SDS IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PROPERLY TRAINED PERSON USING THIS PRODUCT, AND IS NOT INTENDED TO BE COMPREHENSIVE AS TO THE MANNER AND CONDITIONS OF USE, HANDLING, STORAGE, OR DISPOSAL OF THE PRODUCT. INDIVIDUALS RECEIVING THIS MSDS/SDS MUST ALWAYS EXERCISE THEIR OWN INDEPENDENT JUDGMENT IN DETERMINING THE APPROPRIATENESS OF SUCH ISSUES. ACCORDINGLY, AVANTOR PERFORMANCE MATERIALS ASSUMES NO LIABILITY WHATSOEVER FOR THE USE OF OR RELIANCE UPON THIS INFORMATION. NO SUGGESTIONS FOR USE ARE INTENDED AS, AND NOTHING HEREIN SHALL BE CONSTRUED AS, A RECOMMENDATION TO INFRINGE ANY EXISTING PATENTS OR TO VIOLATE ANY FEDERAL, STATE, LOCAL, OR FOREIGN LAWS. AVANTOR PERFORMANCE MATERIALS REMINDS YOU THAT IT IS YOUR LEGAL DUTY TO MAKE ALL INFORMATION IN THIS MSDS/SDS AVAILABLE TO YOUR EMPLOYEES.