

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 30.07.2011

Version number 58

Revision: 30.07.2011

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Hydrogen peroxide in solution 30%
- **Article number:** 2186-01
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation :** For Laboratory, Research or Manufacturing use.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Avantor Performance Materials B.V. Tel: (+31) (0)570 - 687500  
P.O.Box 1 Fax: (+31) (0)570 - 687574  
7400 AA Deventer E-mail : jtbaker.nl@avantormaterials.com  
The Netherlands
- **Informing department:**  
Quality Systems & Regulatory Affairs  
E-mail : sjors.duteweert@avantormaterials.com  
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- **Emergency telephone number:**  
Environment Health & Safety department  
during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS03 flame over circle

Ox. Liq. 2 H272 May intensify fire; oxidiser.



GHS05 corrosion


Eye Dam. 1 H318 Causes serious eye damage.




GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

 Xn; Harmful

R22: Harmful if swallowed.

 Xi; Irritant

R41: Risk of serious damage to eyes.

- **Classification system:**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

- **Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms** GHS03, GHS05, GHS07

- **Signal word** Danger

- **Hazard-determining components of labelling:**

Hydrogen peroxide 50-70%

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- **Hazard statements**

H272 May intensify fire; oxidiser.  
 H302 Harmful if swallowed.  
 H318 Causes serious eye damage.

- **Precautionary statements**

P221 Take any precaution to avoid mixing with combustibles.  
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P220 Keep/Store away from clothing/combustible materials.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER or doctor/physician.

- **Other hazards**







- **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.  
 · **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions.

- **Dangerous components:**

CAS: 7722-84-1	Hydrogen peroxide 50-70%	25 - 50%
EINECS: 231-765-0	 C R35;  Xn R20/22;  O R8 R5	
	 Ox. Liq. 1, H271;  Skin Corr. 1A, H314;  Acute Tox. 4, H302; Acute Tox. 4, H332	

- **Additional information** For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

- **Description of first aid measures**

- **General information**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation** Supply fresh air; consult doctor in case of symptoms.

- **After skin contact**

Seek medical treatment.

Instantly rinse with water.

- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

- **After swallowing**

Rinse out mouth

Seek medical treatment.

Instantly call for doctor.

- **Information for doctor**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**

- **Suitable extinguishing agents** Water

- **For safety reasons unsuitable extinguishing agents**

Carbon dioxide

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Foam.

Extinguishing foam.

Water with a full water jet.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.

- **Environmental precautions:** Dilute with plenty of water.

- **Methods and material for containment and cleaning up:**

Dilute with much water.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

## 7 Handling and storage

- **Handling**

- **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- **Information about protection against explosions and fires:** no special requirements

- **Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by storerooms and containers:** No special requirements.

- **Information about storage in one common storage facility:**

Store away from reducing agents.

Store away from flammable substances.

- **Further information about storage conditions:**

Store in a cool place.

+ 15°C - +25°C

Store in the dark.

- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**

- **Components with critical values that require monitoring at the workplace:**

7722-84-1 Hydrogen peroxide 50-70%

WEL () Short-term value: 2.8 mg/m<sup>3</sup>, 2 ppmLong-term value: 1.4 mg/m<sup>3</sup>, 1 ppm

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

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*Instantly remove any soiled and impregnated garments.**Wash hands during breaks and at the end of the work.**Do not inhale gases / fumes / aerosols.**Avoid contact with the eyes.***· Breathing equipment:***In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.***· Protection of hands:***Protective gloves.**The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.**Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.**Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation***· Material of gloves***The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.***· Penetration time of glove material***The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.***· Eye protection:** *Tightly sealed safety glasses.***· Body protection:** *Protective work clothing.***9 Physical and chemical properties****· Information on basic physical and chemical properties****· General Information****· Appearance:**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Smell:</b>	Odourless
<b>Odour threshold:</b>	Not determined.

**· pH-value:** Not determined.**· Change in condition**

<b>Melting point/Melting range:</b>	-26°C
<b>Boiling point/Boiling range:</b>	100°C
<b>Flash point:</b>	Not applicable
<b>Ignition temperature:</b>	

<b>Decomposition temperature:</b>	Not determined.
<b>Self-inflammability:</b>	Product is not selfigniting.
<b>Danger of explosion:</b>	Product is not explosive.
<b>Critical values for explosion:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

<b>Steam pressure at 20°C:</b>	23 hPa
<b>Density at 20°C</b>	1.1 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Fully miscible
<b>Segregation coefficient (n-octanol/water):</b>	Not determined.

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- |                            |                                                   |
|----------------------------|---------------------------------------------------|
| · <b>Viscosity:</b>        |                                                   |
| <b>dynamic:</b>            | <i>Not determined.</i>                            |
| <b>kinematic:</b>          | <i>Not determined.</i>                            |
| · <b>Other information</b> | <i>No further relevant information available.</i> |
| · <b>VOC in %:</b>         | <i>0.00 %</i>                                     |

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *Heat, boiling temperatures.*
- **Possibility of hazardous reactions**  
*Reacts with acids, alkalis and oxidizing agents*  
*Reacts with alcohols*  
*Reacts with fats and oils*  
*Reacts with reducing agents*
- **Conditions to avoid** *No further relevant information available.*
- **Incompatible materials:** *No further relevant information available.*
- **Hazardous decomposition products:** *No dangerous decomposition products known*

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**  
*on the skin: No irritant effect.*  
*on the eye: Strong irritant with the danger of severe eye injury.*
- **Sensitization:** *No sensitizing effect known.*
- **Additional toxicological information:**  
*The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:*  
*Harmful*  
*Irritant*

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** *No further relevant information available.*
- **Persistence and degradability** *No further relevant information available.*
- **Other information:** *The product is easily biodegradable.*
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** *No further relevant information available.*
- **Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:**  
*Water hazard class (D) 1 (Self-assessment): slightly hazardous for water.*  
*Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.*
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **Other adverse effects** *No further relevant information available.*

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### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

### 14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



- **ADR/RID-GGVS/E Class:** 5.1 (OC1) Oxidising substances.
- **Kemler Number:** 58
- **UN-Number:** 2014
- **Packaging group:** II
- **Label** 5.1+8
- **UN proper shipping name:** 2014 HYDROGEN PEROXIDE, AQUEOUS SOLUTION
- **Limited quantities (LQ)** LQ10
- **Transport category** 2
- **Tunnel restriction code** E

- **Maritime transport IMDG/GGVSea:**



- **IMDG/GGVSea Class:** 5.1
- **UN Number:** 2014
- **Label** 5.1+8
- **Packaging group:** II
- **EMS Number:** F-H,S-Q
- **Marine pollutant:** No
- **Segregation groups** Peroxides
- **Correct technical name:** HYDROGEN PEROXIDE, AQUEOUS SOLUTION

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 5.1
- **UN/ID Number:** 2014
- **Label** 5.1+8
- **Packaging group:** II
- **Correct technical name:** HYDROGEN PEROXIDE, AQUEOUS SOLUTION

- **UN "Model Regulation":** UN2014, HYDROGEN PEROXIDE, AQUEOUS SOLUTION, 5.1 (8), II
- **Special precautions for user** Warning: Oxidising substances.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

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### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS03, GHS05, GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Hydrogen peroxide 50-70%
- **Hazard statements**  
H272 May intensify fire; oxidiser.  
H302 Harmful if swallowed.  
H318 Causes serious eye damage.
- **Precautionary statements**  
P221 Take any precaution to avoid mixing with combustibles.  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P220 Keep/Store away from clothing/combustible materials.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**  
H271 May cause fire or explosion; strong oxidiser.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H332 Harmful if inhaled.  
R20/22 Harmful by inhalation and if swallowed.  
R35 Causes severe burns.  
R5 Heating may cause an explosion.  
R8 Contact with combustible material may cause fire.
- **Department issuing data specification sheet:** Quality Assurance Department
- **Contact:** Sjors duteweert
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- **\* Data compared to the previous version altered.**

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