

according to Regulation (EC) No 1907/2006

## Hydrogen peroxide 30 % technical grade

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

### 1.1. Product identifier

Hydrogen peroxide 30 % technical grade

CX3V-Y16S-P00M-4YS8

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

#### Uses advised against

Do not use for private purposes (household).

# 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH Street: Stempelstraße 6 Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

info@analytichem.de E-mail:

Abteilung Produktsicherheit Contact person: Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analvtichem.de

www.analvtichem.de Internet:

Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: number:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

#### **Further Information**

This product is a mixture. REACH Registration Number see section 3.

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

### Regulation (EC) No 1272/2008

Ox. Liq. 3; H272 Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### Regulation (EC) No 1272/2008

# Hazard components for labelling

hydrogen peroxide solution 30 %

Signal word: Danger

Pictograms:







### **Hazard statements**

H272 May intensify fire; oxidiser.



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H302+H332 Harmful if swallowed or if inhaled.
H318 Causes serious eye damage.

#### **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P313 Get medical advice/attention.

#### 2.3. Other hazards

No data available

### **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

#### Chemical characterization

Mixtures in aqueous solution

### Relevant ingredients

CAS No	Chemical name	Chemical name			
	EC No	EC No Index No REACH No			
	Classification (Regulatio	Classification (Regulation (EC) No 1272/2008)			
7722-84-1	hydrogen peroxide solut	hydrogen peroxide solution %			
	231-765-0	008-003-00-9	01-2119485845-22		
	Ox. Liq. 1, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1A; H271 H332 H302 H314				

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits. M-factors and ATE

CAS No	EC No	EC No Chemical name	
	Specific Conc.	Limits, M-factors and ATE	
7722-84-1	231-765-0	hydrogen peroxide solution %	30 - < 35 %
	> 2000 mg/kg; o	E = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 5 oral: LD50 = 1026 mg/kg Ox. Liq. 1; H271: >= 70 - 100 Ox. Liq. 2; H272: >= 50 orr. 1A; H314: >= 70 - 100 Ox. Liq. 2; H315: Eye Dam. 1; H318: >= 8 - < 50 Eye Irrit. 2; H319: >= 5 - < 8 STOT SE 3; H335:	

#### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### **General information**

Self-protection of the first aider

#### After inhalation

Provide fresh air.

Call a doctor if you feel unwell.

# After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.



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#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an ophthalmologist.

#### After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

## 4.2. Most important symptoms and effects, both acute and delayed

Dizziness, Unconsciousness

Gastrointestinal complaints, Vomiting

Headache, Spasms

Irritant, corrosive

Risk of serious damage to eyes.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

#### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

no restriction

## 5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

Oxidizing

#### 5.3. Advice for firefighters

Avoid contact with skin, eyes and clothes.

In case of fire: Wear self-contained breathing apparatus.

### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3. Methods and material for containment and cleaning up

### For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).



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#### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

#### Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Read label before use.

Handle and open container with care.

Provide adequate ventilation.

Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

#### Advice on protection against fire and explosion

Keep away from combustible material.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### Advice on general occupational hygiene

Take off contaminated clothing.

Wash hands before breaks and after work.

When using do not eat or drink.

### Further information on handling

Take off contaminated clothing and wash it before reuse.

Wash hands before breaks and after work.

Draw up and observe skin protection programme.

#### 7.2. Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Close containers in such a way to enable internal pressure to escape (e.g. excess pressure valve).

Unsuitable container/equipment material: Metal

# Hints on joint storage

Keep away from combustible material.

# Further information on storage conditions

Keep cool. Protect from sunlight.

Protect against: Light, Radiant heat.

#### 7.3. Specific end use(s)

Laboratory chemicals

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters



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### Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
7722-84-1	Hydrogen peroxide	1	1.5		TWA (8 h)	
		2	3		STEL (15 min)	

#### **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7722-84-1	hydrogen peroxide solution %			
Worker DNEL, long-term		inhalation	local	1,4 mg/m³
Worker DNEL, acute		inhalation	local	3 mg/m³
Consumer DNEL, long-term		inhalation	local	0,21 mg/m³
Consumer DNEL, acute		inhalation	local	1,93 mg/m³

#### **PNEC values**

CAS No	Substance	
Environmenta	compartment	Value
7722-84-1	hydrogen peroxide solution %	
Freshwater		0,013 mg/l
Freshwater (intermittent releases)		0,014 mg/l
Marine water		0,013 mg/l
Freshwater sediment		0,047 mg/kg
Marine sediment		0,047 mg/kg
Micro-organisms in sewage treatment plants (STP)		4,66 mg/l
Soil		0,002 mg/kg

## 8.2. Exposure controls

### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

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

### Eye/face protection

Suitable eye protection: goggles.

### **Hand protection**

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data



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sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

#### Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

#### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state: I iauid Colour: colourless Odour: characteristic Odour threshold: No data available

Melting point/freezing point: -26 °C Boiling point or initial boiling point and 107 °C

boiling range:

Flammability: No data available No data available Lower explosion limits: No data available Upper explosion limits: Flash point: No data available Auto-ignition temperature: Decomposition temperature: >100 °C pH-Value (at 20 °C): 3.9 Viscosity / kinematic: No data available Water solubility: very soluble

Solubility in other solvents

not determined

Dissolution rate: No data available No data available Partition coefficient n-octanol/water: Dispersion stability: No data available Vapour pressure: 18 hPa

(at 20 °C)

No data available Vapour pressure: 1,11 g/cm<sup>3</sup> Density: No data available Relative density: No data available Bulk density: Relative vapour density: No data available No data available Particle characteristics:

# 9.2. Other information

### Information with regard to physical hazard classes

Explosive properties No data available

No data available Sustaining combustion:

Self-ignition temperature

Solid: No data available No data available Gas:

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Oxidizing properties

The product is: oxidising, Oxidising.

Other safety characteristics

Evaporation rate: No data available Solvent separation test: No data available Solvent content: No data available Solid content: No data available Sublimation point: No data available Softening point: No data available Pour point: No data available No data available Viscosity / dynamic: No data available No data available Flow time:

Further Information
No data available

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Oxidizing

#### 10.2. Chemical stability

Protect against:

Heat

Light

### 10.3. Possibility of hazardous reactions

Combustible substance, Ether, Oxidising agent

permanganates, e.g. potassium permanganate; Substance, organic

Brass, Alkali metals, Alkaline earth metal

metals, , aldehydes

Alcohol, Amines, Ammonia (NH3)

Acid, Alkali (lye), Acetone

Aniline, Lead, Metal powder

Acetic acid, Acetic anhydride, Methanol

White/yellow phosphor, Phosphorus oxides (e.g. P2O5), Sulphuric acid, concentrated,

Heavy metals, Nitric acid, Phenol

# 10.4. Conditions to avoid

Heat

Light

### 10.5. Incompatible materials

Lead. bronze

ferrous metal, Copper

Brass, silver

metals

### 10.6. Hazardous decomposition products

In case of fire may be liberated:

**SECTION 5: Firefighting measures** 

#### **Further information**

No data available

### **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008



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#### Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

#### **Acute toxicity**

Harmful if swallowed.

Harmful if inhaled.

#### **ATEmix** calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) 5,000 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
7722-84-1	hydrogen peroxide solution	on %				
	oral	LD50 mg/kg	1026	Rat	Study report (1996)	OECD Guideline 401
	dermal	LD50 : mg/kg	> 2000	Rabbit	, , , , , , , ,	other: US EPA Toxic Substance Health Eff
	inhalation vapour	ATE -	11 mg/l			
	inhalation dust/mist	ATE -	1,5 mg/l			

#### Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Conjunctival oedema (chemosis).

#### Sensitising effects

Based on available data, the classification criteria are not met.

### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

## STOT-single exposure

Based on available data, the classification criteria are not met.

# STOT-repeated exposure

Based on available data, the classification criteria are not met.

### **Aspiration hazard**

Based on available data, the classification criteria are not met.

## Information on likely routes of exposure

There are no data available on the mixture itself.

#### Specific effects in experiment on an animal

There are no data available on the mixture itself.

### Additional information on tests

There are no data available on the mixture itself.

### **Practical experience**

There are no data available on the mixture itself.

#### 11.2. Information on other hazards

# **Endocrine disrupting properties**

There are no data available on the mixture itself.

# Other information

Dizziness, Unconsciousness

Gastrointestinal complaints, Vomiting

Headache, Spasms

Irritant, corrosive

Risk of serious damage to eyes.



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#### **Further information**

There are no data available on the mixture itself.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
7722-84-1	hydrogen peroxide solution	hydrogen peroxide solution %					
	Acute fish toxicity	LC50 mg/l	16,4	96 h	Pimephales promelas	Study report (1989)	other:
	Acute algae toxicity	ErC50 mg/l	1,38	72 h	Skeletonema costatum	Study report (1997)	other: Paris Commission guidelines
	Acute crustacea toxicity	EC50	2,4 mg/l	48 h	Daphnia pulex	Study report (1989)	other:
	Crustacea toxicity	NOEC mg/l	0,63	21 d	Daphnia magna	Publication (2008)	other:
	Acute bacteria toxicity	EC50	466 mg/l	- , -	activated sludge of a predominantly domestic sewag	Study report (1999)	OECD Guideline 209

#### 12.2. Persistence and degradability

Readily biodegradable (according to OECD criteria).

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7722-84-1	hydrogen peroxide solution %	-1,57

#### 12.4. Mobility in soil

There are no data available on the mixture itself.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

# 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

Avoid release to the environment.

#### **Further information**

Do not allow to enter into surface water or drains.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not mix with other wastes.

Do not empty into drains.

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.



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The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

### **SECTION 14: Transport information**

Land transport (ADR/RID)

14.1. UN number or ID number: UN 2014

14.2. UN proper shipping name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

14.3. Transport hazard class(es): 14.4. Packing group: Ш Hazard label: 5.1+8 Classification code: OC1 Limited quantity: 1 I Excepted quantity: E2 Transport category: 2 Hazard No: 58 Tunnel restriction code: F

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 2014

**14.2. UN proper shipping name:** Hydrogen peroxide, aqueous solution

14.3. Transport hazard class(es):5.114.4. Packing group:IIHazard label:5.1+8Classification code:OC1Limited quantity:1 LExcepted quantity:E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 2014

**14.2. UN proper shipping name:** Hydrogen peroxide, aqueous solution

14.3. Transport hazard class(es):5.114.4. Packing group:IIHazard label:5.1+8Special Provisions:-Limited quantity:1 LExcepted quantity:E2EmS:F-H, S-Q

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 2014

14.2. UN proper shipping name: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

14.3. Transport hazard class(es):5.114.4. Packing group:-Hazard label:5.1+8Limited quantity Passenger:ForbiddenPassenger LQ:Forbidden

IATA-packing instructions - Passenger:ForbiddenIATA-max. quantity - Passenger:ForbiddenIATA-packing instructions - Cargo:ForbiddenIATA-max. quantity - Cargo:Forbidden

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Oxidising substances.

14.7. Maritime transport in bulk according to IMO instruments



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not applicable

### **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Information according to Directive

P8 OXIDISING LIQUIDS AND SOLIDS

2012/18/EU (SEVESO III):

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant

disappearances and thefts should be reported to the relevant national contact point.

# **National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

### **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 12.

#### Abbreviations and acronyms

Ox. Liq: Oxidising liquid Acute Tox: Acute toxicity Skin Corr: Skin corrosion Eye Dam: Eye damage

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Ox. Liq. 3; H272	
Acute Tox. 4; H302	
Acute Tox. 4; H332	
Eye Dam. 1; H318	Calculation method

### Relevant H and EUH statements (number and full text)

H271 May cause fire or explosion; strong oxidiser.

H272 May intensify fire; oxidiser. H302 Harmful if swallowed.

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.



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H332

Harmful if inhaled.

#### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)