

according to Regulation (EC) No 1907/2006

23293-32 Wide Range-4 pH Indicator

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

1.1. Product identifier

23293-32 Wide Range-4 pH Indicator

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach-lange.de
Internet: www.hach-lange.com
Responsible Department: HACH LANGE Ltd.

Pacific Way

Salford Manchester M50 1DL - United Kingdom

Tel. +44 (0) 161 872 1487 e-Mail: info@hach-lange.co.uk

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info@hach-lange.ie

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: Xi - Irritant

R phrases: Flammable. Irritating to eyes.

Vapours may cause drowsiness and dizziness.

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2.2. Label elements

Danger symbols: Xi - Irritant



Xi - Irritant

Hazardous components which must be listed on the label

propan-2-ol; isopropyl alcohol; isopropanol

R phrases

10 Flammable.



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36	Irritating to eyes.						
67	Vapours may cause drowsiness and dizziness.						
S phrases							
07	Keep container tightly closed.						
16	Keep away from sources of ignition - No smoking.						
26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.						
24/25	Avoid contact with skin and eyes.						

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
231-791-2	Water	45-55 %
7732-18-5		
200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	45-55 %
67-63-0	F - Highly flammable, Xi - Irritant R11-36-67	
603-117-00-0	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water. If skin irritation persists, call a physician.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Call a physician immediately.

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

No known effect.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding



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environment.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.

Advice on protection against fire and explosion

See also section 5

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry, cool place.

Advice on storage compatibility

None known.

7.3. Specific end use(s)

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

Additional advice on limit values

None known.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal



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protective equipment.

Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

Skin protection

Remove and wash contaminated clothing before re-use.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed. Recommended Filter type: ABEK-filter

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: dark green
Odour: alcohol-like

Test method

pH-Value (at 20 °C): 8,7

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

not applicable
Pour point:

not applicable
Pour point:

121 °C

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

Auto-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: no data available

Oxidizing properties

not applicable



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Vapour pressure:no data availableVapour pressure:no data availableDensity (at 20 °C):0,922 g/cm³Bulk density:not applicableWater solubility:completely miscible

(at 20 °C)

Solubility in other solvents

no data available

Partition coefficient:

Viscosity / dynamic:

Viscosity / kinematic:

no data available

Viscosity / kinematic:

no data available

Flow time:

no data available

Vapour density:

no data available

Evaporation rate:

no data available

Solvent separation test:

no data available

9.2. Other information

Solid content: not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data is available on the product itself.

CAS No	Chemical name						
	Exposure routes	Method	Dose	Species	Source		
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol						
	oral	LD50	5045 mg/kg	rat	RTECS		
	dermal	LD50	12800 mg/kg	rabbit			
	inhalative (4 h) vapour	LC50	46,5 mg/l	rat			

Irritation and corrosivity

No known effect.



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Sensitising effects

No known effect.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No data is available on the product itself.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

No data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name							
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source		
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol							
	Acute fish toxicity	LC50	1400 mg/l		Lepomis macrochirus (Bluegill sunfish)			
	Acute algae toxicity	ErC50	> 1000 mg/l		Pseudokirchneriella subcapitata (green algae)	IUCLID		
	Acute crustacea toxicity	EC50	13299 mg/l		Daphnia magna (Water flea)	UICLID		

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded

chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures

of laboratory chemicals

Classified as hazardous waste.

Waste disposal number of used product



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160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded

chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures

of laboratory chemicals

Classified as hazardous waste.

Waste disposal number of contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded

chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures

of laboratory chemicals

Classified as hazardous waste.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 1219

14.2. UN proper shipping name: Isopropanol, solution

14.3. Transport hazard class(es): 3
14.4. Packing group:

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

14.1. UN number: UN 1219

14.2. UN proper shipping name: Isopropanol solution

14.3. Transport hazard class(es):314.4. Packing group:IIMarine pollutant:--

EmS: F-E,S-D

Air transport (ICAO)

14.1. UN number: UN 1219

14.2. UN proper shipping name: Isopropanol solution

14.3. Transport hazard class(es): 3
14.4. Packing group:

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

Other applicable information

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number3316, Package group II, EMS Code: F-A, S-P

SECTION 15: Regulatory information

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



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EU regulatory information

Additional information

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National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Full text of R phrases referred to under Sections 2 and 3

10 Flammable.11 Highly flammable.36 Irritating to eyes.

Vapours may cause drowsiness and dizziness.

Full text of H statements referred to under Sections 2 and 3

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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