

## Total Hardness No.1 Liquid

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

#### 1.1 - Product identifier

Trade name/designation Total Hardness No.1 Liquid

Chemical name

Product-type Mixture

Product code POL20TH1

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

Relevant identified uses - Reagent for water analysis

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

Water-I.D. GmbH

Daimlerstr. 20

76344 Eggenstein Germany

Telephone : +49 (0) 721 - 78 20 29 - 0 Fax +49 (0) 721 - 78 20 29 - 11

Website [www.water-id.com](http://www.water-id.com)

EHS / Compliance: [lab@water-id.com](mailto:lab@water-id.com)

#### 1.4 - Emergency telephone number

- Poison Control Center Munich

Tel: +49 (0) 89 / 19 24 0

Germany

24 hour service

Languages: German, English

please also call from: United Kingdom

### SECTION 2: Hazards identification

#### 2.1 - Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
STOT RE 2	STOT-repeated exposure - Category 2

#### 2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains: ethanediol, ethylene glycol (CAS No.: 107-21-1)

Signal word : Warning

Hazard pictograms



Hazard statements

H302	Harmful if swallowed
H373	May cause damage to organs kidneys through prolonged or repeated exposure (swallowing)

Precautionary statements

## Total Hardness No.1 Liquid

P260	Do not breathe mist, vapours, spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P301+P312	If swallowed: Call a POISON CENTER, a doctor if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P501	Dispose of container to an appropriate recycling or disposal facility.
EUH-phrases	: None

### 2.3 - Other hazards

## SECTION 3: Composition / information on ingredients

### 3.1 - Substances

Not applicable

### 3.2 - Mixtures

Chemical name	No	%	Class	Spec. concentrations
ethanediol, ethylene glycol	CAS No. : 107-21-1 Index No. : 603-027-00-1 EC No. : 203-473-3 REACH No. : 01-2119456816-28-xxxx	30 - 50	Acute Tox. 4 Oral - H302 STOT RE 2 - H373	Not applicable
Tris-(hydroxymethyl)-amino methane	CAS No. : 77-86-1 Index No. : EC No. : 201-064-4	1 - 5	Eye Irrit. 2 - H319 Skin Irrit. 2 - H315 STOT SE 3 (H335) - H335	Not applicable

## SECTION 4: First aid measures

### 4.1 - Description of first aid measures

<u>Following inhalation</u>	- No special measures are necessary. - Provide fresh air.
<u>Following skin contact</u>	- Wash immediately with: Water - When in doubt or if symptoms are observed, get medical advice.
<u>After eye contact</u>	- Rinse immediately carefully and thoroughly with eye-bath or water. - In case of eye irritation consult an ophthalmologist.
<u>After ingestion</u>	- Seek medical advice immediately. - Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours. - Rinse mouth thoroughly with water. - Medical treatment necessary. - When in doubt or if symptoms are observed, get medical advice.

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

<u>Symptoms and effects - Following inhalation</u>	- No information available.
<u>Symptoms and effects - Following skin contact</u>	- No information available.

---

## Total Hardness No.1 Liquid

---

Symptoms and effects - After eye contact - No information available.

Symptoms and effects - After ingestion - No information available.

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

- Treat symptomatically. Antidotal dispensation.

---

### SECTION 5: Firefighting measures

---

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO<sub>2</sub>)
- Foam
- Extinguishing powder

Unsuitable extinguishing media - Full water jet

5.2 - Special hazards arising from the substance or mixture

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

5.3 - Advice for firefighters

- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
- Do not allow run-off from fire-fighting to enter drains or water courses.

---

### SECTION 6: Accidental release measures

---

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.
- Provide adequate ventilation.

For emergency responders - No information available.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.
- Ensure waste is collected and contained.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment - Soak up inert absorbent and dispose as waste requiring special attention.

Methods and material for cleaning up

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Take up carefully when dry.
- Clear contaminated areas thoroughly.
- Clean contaminated articles and floor according to the environmental legislation.

Inappropriate techniques - No information available.

6.4 - Reference to other sections

## Total Hardness No.1 Liquid

- Disposal: see section 13
- Personal protection equipment: see section 8

### SECTION 7: Handling and storage

#### 7.1 - Precautions for safe handling

- |  |   |
|--|---|
| <u>Recommendation</u>                          | <ul style="list-style-type: none"> <li>- After use replace the closing cap immediately.</li> <li>- Avoid exposure - obtain special instructions before use.</li> </ul>  |
| <u>Advices on general occupational hygiene</u> | <ul style="list-style-type: none"> <li>- Wash contaminated clothing prior to re-use.</li> <li>- When using do not eat, drink, smoke, sniff.</li> <li>- Thorough skin-cleansing after handling the product.</li> <li>- Wash hands before breaks and after work.</li> </ul> |

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

- Do not store together with: Food and feedingstuffs

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

### SECTION 8: Exposure controls/personal protection

#### 8.1 - Control parameters

#### 8.2 - Exposure controls

- |  |   |
|--|---|
| <u>Appropriate engineering controls</u>                                      | - No information available.   |
| <u>Individual protection measures, such as personal protective equipment</u> | <ul style="list-style-type: none"> <li>- Suitable eye protection: Eye glasses with side protection</li> <li>- Suitable protective clothing: lab coat</li> <li>- Tested protective gloves must be worn</li> <li>- Suitable material: NBR (Nitrile rubber)</li> </ul> |
| <u>Environmental exposure controls</u>                                       | - Further information: see technical data sheet.  |



### SECTION 9: Physical and chemical properties

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

<u>Physical state</u>	Liquid	<u>Appearance</u>	Liquid
<u>Colour</u>	colourless	<u>Odour</u>	odourless
<u>Odour threshold</u>		No data available	

## Total Hardness No.1 Liquid

pH	8
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
flammability	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Density	No data available
Solubility (Water)	100 %
Solubility (Ethanol)	No data available
Solubility (Acetone)	No data available
Solubility (Organic solvents)	No data available
Log KOC	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

### 9.2 - Other information

VOC content	No data available
Minimum ignition energy	No data available
Conductivity	No data available

## SECTION 10: Stability and reactivity

### 10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

### 10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

### 10.4 - Conditions to avoid

- No information available.

### 10.5 - Incompatible materials

- No information available.

### 10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

## Total Hardness No.1 Liquid

### SECTION 11: Toxicological information

#### 11.1 - Information on toxicological effects

Acute toxicity - Acute toxicity (oral) - Category 4 - Harmful if swallowed

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

- No information available.

Toxicity : Substances

<b>Tris-(hydroxymethyl)-amino methane (77-86-1)</b>	
LD50 oral (rat)	> 5000 mg/kg ECHA
LD50 dermal (rat)	> 5000 mg/kg ECHA
<b>ethanediol, ethylene glycol (107-21-1)</b>	
LD50 oral (rat)	4700 mg/kg

Skin corrosion/irritation - Not classified

Serious eye damage/eye irritation - Not classified

Respiratory or skin sensitisation - Not classified

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive toxicity - Not classified

STOT-single exposure - Not classified

- data lacking

STOT-repeated exposure - STOT-repeated exposure - Category 2 - May cause damage to organs kidneys through prolonged or repeated exposure (swallowing)

Aspiration hazard - Not classified

### SECTION 12: Ecological information

#### 12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available

## Total Hardness No.1 Liquid

ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

### Toxicity : Substances

<b>Tris-(hydroxymethyl)-amino methane (77-86-1)</b>	
ErC50 algae	473 mg/l
<b>ethanediol, ethylene glycol (107-21-1)</b>	
EC50 48 hr crustacea	> 100 mg/l
LC50 96 hr fish	> 72860 mg/l
ErC50 algae	< 13000 mg/l
NOEC chronic crustacea	1000 mg/l

- The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

### 12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available
% of biodegradation in 28 days	No data available

- No information available.

### 12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	No data available

- No indication of bioaccumulation potential.

### 12.4 - Mobility in soil

- No information available.

### 12.5 - Results of PBT and vPvB assessment

### 12.6 - Other adverse effects

- No information available.

## SECTION 13: Disposal considerations

### 13.1 - Waste treatment methods

<u>Waste treatment methods</u>	- Dispose of waste according to applicable legislation.
<u>Sewage disposal</u>	- No information available.
<u>Special precautions for waste treatment</u>	- Waste requires special monitoring. - Collect the waste separately. - Send to a hazardous waste incinerator facility under observation of official regulations.

## Total Hardness No.1 Liquid

- The waste is to be kept separate from other types of waste until its disposal.

Community or national or regional provisions - No information available.

### SECTION 14: Transport information

14.1 - UN number

Not applicable

14.2 - UN proper shipping name

14.3 - Transport hazard class(es)

14.4 - Packing group

14.5 - Environmental hazards

14.6 - Special precautions for user

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

### SECTION 15: Regulatory information

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

Substances REACH candidates None

Substances Annex XIV None

Substances Annex XVII None

VOC content No data available

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

### SECTION 16: Other information

SDS versions

Version	Issue date	Description of the amendments
1	23.10.2018	Creation of MSDS.

Texts of the regulatory sentences

Acute Tox. 4 Oral	Acute toxicity (oral) - Category 4
Eye Irrit. 2	Eye irritation - Category 2
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs kidneys through prolonged or repeated exposure (swallowing)
Skin Irrit. 2	Irritation, Category 2
STOT RE 2	STOT-repeated exposure - Category 2



---

## Total Hardness No.1 Liquid

---

STOT SE 3 (H335)	STOT-single exposure - Category 3 (H335)
---------------------	--

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.

\*\*\* \*\*