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

1.1. Product identifier:

Substance name: Demineralized water.
Substance manufacturer: "CrossChem" Ltd
REACH Registration No.: Not applicable.
CAS No.: 7732-18-5
EC No.: 231-791-2
Index No.: Not applicable.

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

Relevant identified uses:

SU21 – Consumer uses;
SU22 – Professional uses;
PROC5 – Mixing or blending in batch processes;
PROC8b – Transfer of substance or mixture (charging and discharging) at dedicated facilities;
ERC2 – Formulation into mixture.

Descriptor codes are only indicative, as they are dependent on end use of consumer.

Uses advised against: Not applicable.
Reason why uses advised against: Not applicable.

1.3. Details of the Supplier of the safety data sheet:

Manufacturer / Supplier: "CrossChem" Ltd.;
Street address / P.O. Box: "Naftaluka", Olaines pagasts, Olaines novads, LV-2127, Latvia. (Office, factory, warehouse).
National Registration No.: 40003888244
Telephone number: +371 26624000 (Administration)
E-mail: info@crosschem.lv
Homepage: https://crosschem.lv/
E-mail address of competent person, responsible for the SDS: andris.matiss@crosschem.lv

1.4. Emergency telephone number:

State Fire and Rescue Service: **(+371) 112**
Working hours: 24 hours a day, 365 days a year.

National Toxicology Center: **(+371) 67042468; (+371) 67000610**
Opening hours: Working days from 8:00 to 17:00, weekends and public holidays from 9:00 to 15:30.
Other notes: Help is provided in Latvian, Russian and English.

SECTION 2. Hazards identification.

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP):

This substance is not classified as dangerous under Regulation No.1272/2008.

2.2 Label elements:

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

Substance does not need to be labeled in accordance with CLP and relevant national laws.

Hazard pictograms: Not required.
Signal word: Not required.
Hazard statements: Not required.
Precautionary statements: Not required.

Supplemental Hazard information (EU): Not applicable.
2.3. Other hazards: Not applicable.

SECTION 3. Composition / information on ingredients.

3.1. Substance:

Name of the substance	CAS No.	EC No.	REACH No.	Clasification according to (EC) No. 1272/2008.	W%/W
Water	7732-18-5	231-791-2	Not available.	Not applicable.	65 – 69%

3.2. Mixtures: Not applicable**.**

SECTION 4. First aid measures.

4.1. Description of first aid measures:
General information:
In case of accident or unwelness, seek medical advice immediately. Keep the victim calm. If the person is unconscious, place person in stable recovery position. Consult a physician.

Following inhalation:
If product gets into the lungs, remove the person to fresh air. If not breathing, give artificial resuscitation (CPR). In every cases where there is doubt of person's life or if symptoms remain, seek medical attention.

Following skin contact: No special first aid precautions are required.
Following eye contact: No special first aid precautions are required.
Following ingestion: No special first aid precautions are required.

Self-protection of the first aider:
Pay attention to self protection. Comply with general hygiene requirements. Wear suitable protective clothing and gloves.

4.2. Most important symptoms and effects, both acute and delayed:
If product gets into the lungs, you may experience laboured breathing, cough and chest pain. Product can irritate the lungs' lining and fluid can build up, causing a condition called pulmonary edema.

4.3. Indication of any immediate medical attention and special treatment needed:
Notes to doctor: Treat Symptomatic.

SECTION 5. Firefighting measures.

5.1. Extinguishing media:
Suitable extinguishing media: Not applicable.
Unsuitable extinguishing media: Not applicable.

5.2. Special hazards arising from the substance or mixture:
Hazardous combustion products:
Product is non-flammable and does not present a fire risk.

5.3. Advice for firefighters:
Special protective equipment for fire-fighters:
Do not enter fire area without proper protective equipment, including respiratory protection. When the potential chemical hazard is unknown, in enclosed or confined spaces, a selfcontained breathing apparatus (SCBA) with a full face mask and protective fire-fighting clothing (including: fire helmet, overalls, pants, boots, gloves, eye and face protection.) must be worn.

Fire fighter's clothing conforming to European standard **EN469** provides a basic level of protection for chemical incidents and includes helmets, protective boots and gloves. Clothing not conforming to EN469 may not be suitable in any chemical incident. Use SCBA with a chemical protection suit only where personal (close) contact is likely to happen.

5.4. Additional information:

Stay down-wind during firefighting.
Promptly isolate the scene by removing all unauthorized persons from the area of the incident if there is a fire.
A pressure increase will occur if containers are exposed to heat, therefore evaporation of water can result in rupture of container, it may burst. Cool containers with a cold water spray. If there is no risk, move the containers away from the heat source. Stop spill/release if it can be done with minimal risk. If possible, collect used extinguishing water separately, to prevent it from entering drains. Water mist may be useful in minimizing or dispersing vapors. Short-term expousures to hot vapor may lead to irreversible lung injury without early signs of symptoms.

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:
Put on appropriate protective equipment (see Section 8.). Consult an emergency expert. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. Particular danger of slipping on leaked/spilled product.

For emergency responders:
Wear appropriate protective equipment (see Section 8.). Stop leak if possible, without risk. Isolate and evacuate the danger zone, reduce the presence of persons, who are not involved in the rescue operation. Particular danger of slipping on leaked/spilled product.

6.2. Environmental precautions:

No special precautions required.

6.3 Methods and material for containment and cleaning up:

For containment:
Clogging or cover drains. In the event of a major leak, stop the flow of productl by using: booms and pads, which can be found in spill kit if, it is safe to do. Scoop as much product as possible in to tight and secure containers. Absorb remains in vermiculite, dry sand, sawdust or silica gel and place the used absorbent in closed, secure and suitable containers.

For cleaning up:
After containing spill, clean up remains and mop up. In the case of small spills, wipe the surface with absorbent material such as fabric or wool.

6.4. Other information:

See Section 8 for personal protective equipment and Section 13 for waste disposal.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling:

Protective measures:
Handle opened container with care, close after use. Handle in accordance with good industrial hygiene and safety procedures. Use appropriate protective equipment: protective clothing, gloves, goggles and respirator if necessary (see Section 8.).

Measures to prevent fire:
This substance is non-flammable, special fire protection measures are not required. Follow preventative fire protection regulations.

Measures to prevent aerosol and dust generation:
Avoid spraying in enclosed areas.

Measures to protect the environment: No special requirements.

Advice on general occupational hygiene:
Provide adequate ventilation in areas where aerosol and water vapor is formed. Wash your hands and face with mild soap and water after use, before breaks, at the end of the working day, dry your hands by using towel. Do not eat, drink or smoke when using the product and in areas where product is handled, stored and processed. Remove contaminated clothing and protective equipment before entering eating areas. Regular cleaning of equipment, work area and clothing is recommended. Use protective equipment while cleaning if necessary.

7.2. Conditions for safe storage, including any incompatibilities:
Technical measures and storage conditions:
Do not store in temperatures below 1°C and above 40°C. Store away from direct sunlight. Do not freeze. Good general ventilation should be sufficient to control worker exposure to vapor. If this product exceeds exposure limits, use process enclosures: local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Packaging materials:
Suitable packing material: Containers manufactured of high alloyed austenitic Cr-Ni, Cr-Ni-Mo steels, titanium, Ni-Mo-Cr-Mn-Cu-Si-Fe alloys, stainless steel, glass, polyethylene, polypropylene, polyisobutylene, polyfluoroethylene (PFE), perfluoroalkoxy alkane (PFA), polytetrafluoroethylene (PTFE), copolymers (vinylidene fluorides(PVDF) and hexafluoropropylenes – viton - (HFP)).
Non suitable packaging materials: Galvanised steel containers, lead.

Product can be packed in the package chosen by the buying customer, as long as it ensures safe transportation and storage of the product.

Requirements for storage rooms and vessels:
Store product protected from direct sunlight in a dry, cool and well-ventilated area. Do not freeze. Floors must be leak-proof or covered with insulation material. Contact local authorities for further information on storage requirements.

Containers that have been opened must be carefully reinforced and kept upright to prevent leakage. Keep containers tightly closed when not in use. Keep containers protected from physical damage. Check regularly for leaks. Keep preferably in the original container. Do not remove the hazard labels of the containers (even if they are empty). Do not store in unlabeled containers.

Storage class: Not applicable.

Further information on storage conditions:
Product has a shelf life of 3 years, if in unopened manufacturers packing, if stored in a cool and dry location and away from direct sunlight.

7.3. Specific end use(s):
It is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8. Exposure controls / personal protection.

8.1. Control parameters:
Components with workplace control parameters:

Component	CAS No.	Control parameter; value (LV)		Base
		OEL 8h.	Short term, 15 min.	
Water	7732-18-5	Not specified.	Not specified.	Occupational health and safety requirements for exposure to chemicals at work spaces

DNEL values of exposure to human health:
DNEL of the product is not determined. Product is considered to have no influence on human health.

Predicted no effect contrentation values:
PNEC of the product is not determined. Product is considered to have no influence on human health.

8.2. Exposure controls:

Appropriate engineering controls:
Good general ventilation should be provided to control worker exposure to airborne vapor or mists, especially in confined spaces. Adhere to good industrial hygine rules when using or handling the product. Emissions from ventilation or work process equipment should be recommended to checked to ensure they comply with the requirements of environmental protection legislation.

Personal protection equipment:

Eye and face protection:
Use eye and face accessories that have been tested and approved in accordance with relevant standards such as: NIOSH (US) or EN 166 (EU). It is recommended to use polycarbonate safety glasses, goggles, tightly fitting goggles or face shield.

Body protection:
Choose the type of body protection according to the situation. Workwear must comply with EN ISO 13688 standard and special work shoes must comply with EN ISO 20347:2012 standard.

Respiratory protection:
Use dust mask N95 (US) or P1 (EN143) or P2 to protect against aerosol in the air. Use respirators and accessories tested and approved in accordance with relevant national and international standards, NIOSH (USA) or CEN (EU). If the respirator is the sole means of protection, use a full-face air supplied respirator.

Skin protection:
Gloves should be inspected before use. Use appropriate glove removal techniques (without touching the inside of the glove) to avoid contact with the product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry your hands. The gloves used must be chemically resistant in accordance with EN 420 and EN ISO 374-1. Protective gloves must be made of one of the materials, with the relevant specifications listed in the table below:

Glove material	Glove Thickness (mm)	Penetration time (min)
Buthyl rubber	0.50	> 480
Nitrile rubber/ Nitrile latex	0.50	> 480
Fluorocarbon rubber	0.50	> 480
Polychloroprene	0.50	> 480
Natural rubber/Natural latex	0.50	> 480
Polyvinyl chloride	0.50	> 480

*Please note that the penetration time of the glove material in this section has been set at 22°C and using pure water. When working at a higher temperature, the resistance of the glove material may be considerably lower, and in such cases, the permitted life of the glove must be shortened. A 1.5-times increase / decrease in the layer thickness doubles / halves the breakthrough time. This data only applies to the pure substance. We recommend that when you start using a new type or other manufacturer's gloves, make sure that they are chemically and mechanically resistant to working conditions. If you have any doubt about the suitability of the gloves, please contact the suppliers of gloves. Transferred to mixtures of substances, these figures should only be taken as an aid to orientation.

Thermal hazards: Not apllicable.

8.3. Environmental exposure controls:

Do not allow product to enter drains, surface waters or ground waters. See Section 6. for substance related measures to prevent exposure to environment.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties:

a) **Appearance**: Colorless liquid at 20°C and a pressure of 1013 hPa.
b) **Odour:** Odourless.
c) **Odour threshold:** Not measured.
d) **pH:** 6.5 – 7.5 at 20°C temp.
e) **Melting / freezing point:** 0°C.
f) **Initial boiling point and boiling range:** 100°C.

g) **Flash point:** Non flammable.
h) **Evaporation rate:** Not applicable.
i) **Flammability:** Non-flammable.
j) **Upper / lower flammability or explosive limits:** Non-flammable. Non-combustible.
k) **Vapour pressure:** 3.167 kPa at 20°C.
l) **Vapour density:** For none flamable liquids is not determined.
m) **Relative density:** 0.997 – 1.000 g/ml at 20°C temp.
n) **Solubility:** Not applicable.
o) **Partition coefficient: n-octanol/water:** Not applicable.
(**Auto-ignition temperature**: Not charactheristic.
p) **Decomposition temperature**: > 2200°C.
q) **Viscosity:** 0.890 cP(dynamic) at 25°C temp.
r) **Explosive properties:** Based to column 2 of Annex VII to the REACH Regulation, does not apply, substance is not explosive. There are no chemical groups associated with explosive properties.
s) **Oxidising properties:** Based on column 2 of Annex VII to the REACH Regulation, does not apply substance is not oxidising. There are no chemical groupos associated with ozidising properties.

9.2 Other safety information: None.

SECTION 10. Stability and reactivity.

10.1. Reactivity:
Stable under regular conditions of transportation and use (see Section 7. "Handling and Storage").

10.2. Chemical stability:
Stable under storage, transportation and using conditions at normal ambient temperatures (+1°C to +40°C), (see Section 7. "Handling and Storage").

10.3. Possibility of hazardous reactions:
No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid:
Avoid direct sunlight, heat, high temperatures (>100°C), freezing temperatures (<1°C), flames, sparks and incompatible materials.

10.5. Incompatible materials:
Alkaline and alkaline earth metals, aluminum phosphide, carbides, Grignard reagents RMgX, alkali metal amides, alkali metal hydrides, lithium aluminum hydrides, metal alkyls, lithium and aluminum alkyls, inorganic acid halides, halides of non-metals and acid anhydrides.

Caution when mixing water with strong acids and strong bases as it is exothermic reaction.

10.6. Hazardous decomposition products:
Hydrogen (H_2) and oxygen (O_2) above >2200°C. Under normal conditions of storage and use, hazardous decomposition products are not produced.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects:
Acute toxicity studies of the product are not available.

Acute toxicity:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification:
After studying all the routes of exposure, product is not considered as toxic substance.

Skin corrosion / irritation:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification:
Following the studied routes of exposure, water is not classified as a skin corrosive / irritant.

Serious eye damage / irritation:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification: Water is not classified as irritating to the eyes.

Respiratory or skin sensitisation:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification:
Product is not considered to be a skin sensitizer and is therefore not subjected for labelling and classification requirements according to Regulation (EC) No 1272/2008.

Germ cell mutagenicity:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification: Water is not classified as genetic toxicant.

Carcinogenicity:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification:
Water is not considered to be classified for carcinogenicity under Regulation (EC) No 1272/2008.

Reproductive toxicity:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification:
Water does not appear to be toxic to reproduction. As a result, the product is not classified for toxicity to reproduction under Regulation (EC) No 1272/2008.

Summary of evaluation of the CMR properties:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification:
Water does not meet the criteria for classification as mutagenic for reproduction category 1A or 1B (CLP).

STOT-single exposure:

Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification: Based on available data, the classification criteria are not met.

STOT-repeated exposure:

Effects on humans: No data available.
Effects on animals: No data available.

Other information: No data available.
Assessment / Classification:
Based on available data, the classification criteria are not met for water to be classified for repeated dose toxicity under Regulation (EC) No 1272/2008.

Aspiration hazard:
Effects on humans: No data available.
Effects on animals: No data available.
Other information: No data available.
Assessment / Classification: Based on available data, the classification criteria are not met.

SECTION 12. Ecological information.

12.1 Toxicity:
Studies of ecological information of the product are not available.

Acute (short-term) toxicity: No data available.
Chronic (long-term) toxicity: No data available.

12.2. Persistence and degradability:
Biodegradation:
Aerobic: Not applicable.
***Other information*:** Not applicable.

12.3. Bioaccumulative potential:
Partition coefficient n-octanol / water (log Kow): Not available.
Bioconcentration factor (BCF): Not applicable.

12.4. Mobility in soil:
Known or predetermined prevalence in environmental compartments: No data available.
Surface tension: 72.86 $mN^{*}m^{-1}$ at 20°C.
Adsorption / Desorption: Not applicable.
Water is expected to have high mobility in soil.

12.5. Results of PBT and vPvB assessment:
In accordance with Regulation (EC) No 1907/2006, Annex XIII, the water does not meet the PBT and vPvB criteria and is not a PBT or vPvB substance.

12.6. Other adverse effects: None.
12.7. Additional information: No data available.

SECTION 13. Disposal considerations.

13.1 Waste treatment methods:
Product / Packaging disposal:
In accordance to annex III of "Commission notice on technical guidance on the classification of waste" **(2018/C 124/01)**, the product, without any impurities, **is not** classified as hazardous waste. In accordance to Commission decision **(2014/955/EU)** and Republic of Latvia Cabinet of Ministers Regulation **No. 302**, the product, without any impuritiues, **is not** classified as hazardous waste (see EWC codes).

Empty the product cans or drums, free them from as much of the product as possible. In accordance with Regulation **(EC) No. 1357/2014,** empty packaging, **is not** classified as hazardous waste. Re-use or dispose clean packing material.

Dispose of product and its packaging safely in accordance with regional and national environmental regulations. Contact nearest waste disposal facility for further instructions.

Waste codes / waste designations according to EWC:
According to the European Waste Catalog (EWC) and European List of Waste (LoW), the applicable codes for product are:
EWC 15 01 02 – Plastic packing (MNH – Mirror, non-hazardous).
This code is only indicative, as it depends on the intended end use by the user.

Sewage disposal-relevant information:
Waste can be disposed of by release into sewers.

Other disposal recommendations:
No specific disposal method required.

SECTION 14. Transport information.

ADR	IMDG	ICAO-TI/IATA-DGR	ADN	RID
14.1. UN Number:				
Not applicable.				
14.2. UN proper shipping name:				
Not applicable.				
Transport document description:				
Not applicable.				
14.3. Transport hazard class(es):				
Not applicable.				
14.4. Packing group:				
Not applicable.				
14.5. Environmental hazards:				
Not applicable.				

14.6. Special precautions for users:

ADR:	Not applicable.
IMDG:	Not applicable.
ICAO-TI/IATA-DGR:	Not applicable.
ADN:	Not applicable.
RID:	Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

SECTION 15. Regulatory information.

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

- Regulation (EC) No. **1907/2006** of the European Parliament and Council of 18. December 2006 on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH);
- Regulation (EC) No. **1272/2008** - classification, labelling and packaging of substances and mixtures (CLP);
- Commission regulation (EU) No. **1357/2014** of 18 December 2014 replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives;
- European Agreement concerning the International Carriage of Dangerous Goods by Road **(ADR)**;
- European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (**ADN**);
- Commission notice on technical guidance on the classification of waste **2018/C 124/01**;
- Directive **2008/98/EC** of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives;
- **2014/955/EU:** Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council Text with EEA relevance.

International regulations:

- Regulations concerning the International Carriage of Dangerous Goods by Rail (**RID**);

- International Maritime Dangerous Goods Code (**IMDG**);
- Internationall Aviation Transport Association regulations (**IATA-DGR**);
- International Civil Aviation Organization Transport Instructions **(ICAO-TI)**;
- International Convention for the Prevention of Pollution from Ships (**MARPOL 73/78**);
- International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (**IBC Code**);

National regulations (Latvia):

- Chemical Substances Law;
- Republic of Latvia Cabinet of Ministers Regulation **No. 795**: "Procedures for Registration of Chemical Substances and Mixtures and Their Database";
- Republic of Latvia Cabinet of Ministers Regulation **No. 325**: "Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces";
- Republic of Latvia Cabinet of Ministers Regulation **No. 302:** "Provisions regarding the waste classification and the characteristics rendering the hazardous waste";
- Republic of Latvia Cabinet of Ministers Regulation **No. 107 (2002)** "Procedure for Classification, Labeling and Packaging of Chemicals and Chemical Products";
- Labour Protection Law;
- **LVS EN 149 + A1:2009** - Standard for disposable dust respirators with or without valve according to which they are labeled with FFP1, FFP2 or FFP3 depending on protection class;
- **LVS EN 143:2002 + AC/AC:2005** - Standard for dust filters P1, P2, P3 for use with half masks and full face masks;
- **LVS EN 14387:2004+A1:2008** - Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking;
- **EN 420**: The standard of glove safety;
- **LVS EN 388** - "Protective gloves against mechanical effects";
- **EN469** - Protective clothing for firefighters - Requirements for firefighting protective clothing;
- **LVS EN ISO 374-1** - "Protective gloves against dangerous chemicals and microorganisms";
- **LVS EN 166:2002** - "Individual eye protection. Specifications ";
- **LVS EN ISO 13688** - "Protective clothing - General requirements;
- **LVS EN ISO 20347:2012** - "Personal protective equipment - Occupational footwear".

15.2. Chemical safety assessment:

No chemical Safety Assessment has been carried out for this mixture.

SECTION 16. Other information.

16.1. Indication of changes:

Date of issue: **10.02.2016.**
Date of revision: **22.10.2019.**
Version: **2.0.**

16.2. List of abbreviations and acronyms used throughout the Safety Data Sheet:

CPR – Artificial respiration or cardiopulmonary resuscitation;
SCBA – Self-contained breathing apparatus;
OEL – Occupational exposure limit;
DNEL – Derived njo effect level;
PNEC – Predicted no effect contrentation;
STOT – Specific target organ toxicity;
CMR – Carcinogenic, mutagenic and reprotoxic chemicals;
PBT/ vPvB – Persistent, bioaccumulative and toxic and very persistent and very bioaccumulative;
OECD – Organisation for Economic Co-operation and Development;
PPM – Parts per million;
BW – Body weight.

16.3. Key literature references and sources for data:
Toxnet, ECHA, GESTIS substance database.