

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name	SUPERWASH SWR 20
Pure substance/mixture	Mixture.

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

Recommended Use Sludge remover for central heating systems.

Uses advised against None known.

1.3 Details of the supplier of the safety data sheet

Company Information	RDZ Spa Viale Trento, 101 33077 Sacile (PN), ITALY
	TIALY

Telephone	+39 0434.787511
Fax	+39 0434.787522

For further information, please contact:

E-mail Address

info@rdz.it

1.4 Emergency telephone

Emergency telephone

+44 (0) 1928 704 339 (24 hours/ 7 days)

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not classified

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Signal Word None

Hazard Statements
None

Precautionary statements None

2.3 Other hazards

May cause skin and eye irritation. Ingestion may cause irritation of the gastrointestinal tract.

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT) This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical Name	EC-No	CAS-No	w/w%	Classification (EU Reg. 1272/2008)	REACH Registration Number
Potassium hydroxide	215-181-3	1310-58-3	<1	Acute Tox. 4 (H302) Skin Corr. 1A (H314)*	01-2119487136-33- XXXX

For the full text of H-Statements see Section 16

* Substance with Workplace Exposure Limit. See Section 8.

Section 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms develop obtain medical attention.
Skin contact	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. If symptoms develop obtain medical attention.
Ingestion	Do NOT induce vomiting. Wash out mouth with water and give 100 - 200 ml of water to drink. If symptoms develop obtain medical attention.
Inhalation	Remove patient from exposure, keep warm and at rest. If symptoms develop obtain medical attention.
4.2 Most important symptoms an	id effects, both acute and delayed
Main Symptoms	May cause skin and eye irritation. Ingestion may cause irritation of the gastrointestinal tract.
4.3 Indication of any immediate r	nedical attention and special treatment needed
Notes to physician	Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Water spray, Foam, Dry powder, Carbon dioxide (CO₂).

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NOx).

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Cool containers / tanks with water spray.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with the skin and the eyes. Avoid inhalation of mists or vapor. Use personal protective equipment.

6.2 Environmental precautions

Not required

6.3 Methods and materials for containment and cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

6.4 Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

Section 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Do not eat, drink or smoke during work. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container/package in a cool well-ventilated place. Keep away from heat and sources of ignition. Keep away from direct sunlight. Protect from frost.

7.3 Specific end use(s)

Sludge remover for central heating systems.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	Potassium hydroxide	
	1310-58-3	
The United Kingdom	STEL: 2 mg/m ³	
France	STEL: 2 mg/m ³	
Spain	STEL: 2 mg/m ³	
Portugal	Ceiling: 2 mg/m ³	
Finland	STEL: 2 mg/m ³ Ceiling: 2 mg/m ³	
	Ceiling: 2 mg/m ³	
Denmark	Ceiling: 2 mg/m ³	
Austria	TWA: 2 mg/m ³	
Switzerland	TWA: 2 mg/m ³	
Poland	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³	
	TWA: 0.5 mg/m ³	
Norway	Ceiling: 2 mg/m ³	
Ireland	STEL: 2 mg/m ³	

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available (PNEC)

8.2 Exposure controls

Appropriate engineering controls	Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded.
Personal protective equipment Eye Protection Hand Protection Skin and body protection Respiratory protection	Goggles (EN 166) Protective gloves (EN 374) Long sleeved clothing Not normally required. In case of insufficient ventilation wear suitable respiratory equipment
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental Exposure Controls	Not normally required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physica	l and chemical properties	
Physical state	Liquid	
Appearance	Aqueous solution	
Odor	Characteristic	
Color	Clear, yellow-amber.	
Odor Threshold	No information available	
Property Values		Remarks • Methods
рН	7.0	@ 25 °C
Melting/freezing point	-8 °C	
Freezing Point		No information available
Boiling point/boiling range	100 °C	
Flash Point	> 100 °C	
Evaporation rate	< 1	(ether = 1)
Flammability (solid, gas)		Not applicable
Flammability Limits in Air		No information available
upper flammability limit		
lower flammability limit		
Vapor pressure		No information available
Vapor density	<1	(Air = 1.0)
Relative density	1.04	@ 25 °C
Water solubility		Miscible
Solubility in other solvents		No information available
Partition coefficient:		No information available
n-octanol/water		
Auto-ignition temperature		No information available
Decomposition temperature		No information available
Viscosity, kinematic	10 mPa⋅s	@ 20 °C
Viscosity, dynamic		No information available
Explosive properties	Not explosive	
Oxidizing properties	Not oxidizing	

9.2 Other information

No information available

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NOx).

Section 11: TOXICOLOGICAL INFORMATION

Inhalation	No known effect based on information supplied.
Eye contact	May cause eye irritation.
Skin contact	May cause skin irritation.
Ingestion	Ingestion may cause irritation of the gastrointestinal tract.

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral: LD50 Dermal:	> 30000 mg/kg (rat) C > 14000 mg/kg (rabbit		
Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	365mg/kg (Rat)	-	-
Skin corrosion/irritation	Based on available data,	classification criteria are not met.	
Serious eye damage/irritation	Based on available data,	classification criteria are not met.	
Respiratory or skin sensitisatio	n Based on available data,	classification criteria are not met.	
Mutagenicity	Based on available data,	classification criteria are not met.	
Carcinogenicity	Based on available data,	classification criteria are not met.	
Reproductive toxicity	Based on available data,	classification criteria are not met.	
STOT - Single exposure	Based on available data,	classification criteria are not met.	
STOT - Repeated exposure	Based on available data,	classification criteria are not met.	
Aspiration hazard	Based on available data,	classification criteria are not met.	

Other information

No information available.

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity

EC₅₀ (Daphnia magna): >7000 mg/l/48h (Estimated)

WGK Classification Not classified

12.2 Persistence and degradability

Some of the components are biodegradable.

12.3 Bioaccumulative potential

Chemical Name	Bioconcentration factor (BCF)	log Pow
Potassium hydroxide	-	0.65
		0.83

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues / unused products	Disposal should be in accordance with local, state or national legislation.
Contaminated packaging	Clean container with water. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14: TRANSPORT INFORMATION

Not classified as hazardous for transport.

		ADR/RID/ADN	ICAO/IATA	IMDG / IMO
14.1	UN Number	-	-	-
14.2	UN proper shipping name	-	-	-
14.3	Transport hazard class(es)	-	-	-
14.4	Packing group	-	-	-
14.5	Environmental Hazards	Not Classified	Not Classified	Not Classified
14.6	Special precautions for user	No special precautions are needed in handling this material		
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

This safety data sheet complies with the requirements of Regulations (EC) No. 1907/2006 and No. 830/2015

WGK Classification Not classified

15.2 Chemical Safety Assessment

Chemical Safety Assessment has not been carried out.

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage

Issuing Date	01/06/17
Revision Date	27-Jun-2017
Revision Note	All sections.

Disclaimer

The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures.

Issuing Date 01-June-2017

Revision Date 03.08.17

Version 2.4



