

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Total Hardness Tablet Count

Revision date 11-30-2021

Revision Number 2

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

1.1. Product identifier

Product Code(s) TBSRTH

Product Name Total Hardness Tablet Count

Unique Formula Identifier (UFI) 89V6-E0F2-X22V-0AR8

Pure substance/mixture Mixture Contains Lithium hydroxide monohydrate

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

Recommended use Reagent for water analysis

Uses advised against Others

1.3. Details of the supplier of the safety data sheet

Manufacturer

Water-I.D. GmbH Daimlerstr. 20 76344 Eggenstein, Germany Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11 Website: www.water-id.com EHS / Compliance: lab@water-id.com

1.4. Emergency telephone number

Emergency Telephone

Poison Control Centre Munich Tel.: +49 (0) 89 19 24 0 Germany 24 hours service Languages: German, English

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008	
Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)

2.2. Label elements

Contains Lithium hydroxide monohydrate



Signal word Warning

Hazard statements H302 - Harmful if swallowed H332 - Harmful if inhaled

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P312 - Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P501 - Dispose of contents/ container to an approved waste disposal plant

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Cellulose 9004-34-6	50-70	No data available	232-674-9	No data available			
Lithium hydroxide monohydrate 1310-66-3	1-10	No data available	-	No data available			
Silica, amorphous 7631-86-9	<1	No data available	231-545-4	No data available			
Magnesium stearate 557-04-0	<1	No data available	209-150-3	No data available			

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Cellulose	5000	2000	5.8		

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Chemical name	Oral LD50	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
			hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
9004-34-6					
Lithium hydroxide monohydrate 1310-66-3	363		>6.15		
Silica, amorphous 7631-86-9	7900	5000	2.08		

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.				
Inhalation	If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. If symptoms persist, call a doctor.				
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.				
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.				
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.				
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing dust/fume/gas/mist/vapours/spray. Use personal protective equipment as required. See section 8 for more information.				
4.2. Most important symptoms and	effects, both acute and delayed				
Symptoms	Coughing and/ or wheezing. Difficulty in breathing.				
4.3. Indication of any immediate medical attention and special treatment needed					
Note to doctors	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 environment.				
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.				
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.				
5.2. Special hazards arising from the substance or mixture					
Specific hazards arising from the chemical	No information available.				

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective	ve equipment and emergency procedures
Personal precautions	Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.
6.2. Environmental precautions	
Environmental precautions	See Section 12 for additional Ecological Information.
6.3. Methods and material for conta	ainment and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
6.4. Reference to other sections	
Reference to other sections	See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid generation of dust. Ensure adequate ventilation. Do not eat, drink or smoke when using this product.					
General hygiene considerations	Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product.					
7.2. Conditions for safe storage, including any incompatibilities						
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.					

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Cellulose	-	-	TWA: 10 mg/m ³	-	TWA: 10 mg/m ³

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9004-34-6							TWA: 4 mg/m ³ STEL: 20 mg/m ³	
Lithium hydroxide monohydrate 1310-66-3		-	-	-		-	STEL: 1 mg/m ³	
Silica, amorphous 7631-86-9	TWA	A: 0.1 mg/m ³	TWA: 4 mg/m ³	-	TWA: (0.1 mg/m ³	-	
Magnesium stearate 557-04-0		-	-	TWA: 10 mg/m ³		-	-	
Chemical name		Cyprus	Czech Republic	Denmark	Es	stonia	Finland	
Cellulose 9004-34-6		-	-	TWA: 1 mg/m ³	TWA:	10 mg/m ³	-	
Silica, amorphous 7631-86-9		-	TWA: 0.1 mg/m ³ TWA: 4.0 mg/m ³	-	TWA:	2 mg/m ³	TWA: 5 mg/m ³	
Chemical name		France	Germany	Germany MAK	G	reece	Hungary	
Cellulose 9004-34-6	TWA	4: 10 mg/m ³	-	-	TWA:	5 mg/m ³	TWA: 3 mg/m ³	
Silica, amorphous 7631-86-9		-	TWA: 4 mg/m ³	TWA: 4 mg/m ³	TWA: (0.1 mg/m ³	-	
Chemical name		Ireland	Italy	Italy REL	L	atvia	Lithuania	
Cellulose 9004-34-6		A: 10 mg/m ³ L: 30 mg/m ³	TWA: 5.00 mg/m ³	TWA: 10 mg/m ³	TWA:	2 mg/m ³	-	
Lithium hydroxide monohydrate 1310-66-3	STE	EL: 1 mg/m ³	-	-		-	-	
Silica, amorphous 7631-86-9	TWA STE	A: 6 mg/m ³ A: 2.4 mg/m ³ L: 18 mg/m ³ L: 7.2 mg/m ³	-	-	TWA:	1 mg/m ³	-	
Magnesium stearate 557-04-0	TWA: 10 mg/m ³ STEL: 30 mg/m ³		-	TWA: 10 mg/m ³ TWA: 3 mg/m ³		-	TWA: 5 mg/m ³	
Chemical name		xembourg	Malta	Netherlands	Norway		Poland	
Cellulose 9004-34-6		-	-	-	-		TWA: 3 mg/m ³	
Silica, amorphous 7631-86-9		-	-	TWA: 0.75 mg/m ³		1.5 mg/m ³ : 3 mg/m ³	-	
Chemical name		Portugal	Romania	Slovakia	Slo	ovenia	Spain	
Cellulose 9004-34-6	TWA	4: 10 mg/m ³	TWA: 10 mg/m ³	-		-	TWA: 10 mg/m ³	
Silica, amorphous 7631-86-9		-	-	-	TWA:	4 mg/m ³	-	
Magnesium stearate 557-04-0	TWA	4: 10 mg/m ³	-	-		-	TWA: 10 mg/m ³	
Chemical name			weden	Switzerland			ted Kingdom	
Cellulose 9004-34-6			: 2 mg/m ³	TWA: 3 mg/m ³		TV STE	'A: 10 mg/m ³ VA: 4 mg/m ³ EL: 20 mg/m ³ EL: 12 mg/m ³	
Silica, amorphous 7631-86-9			-	TWA: 4 mg/m ³		TV TW STE	TWA: 6 mg/m ³ TWA: 2.4 mg/m ³ STEL: 18 mg/m ³ STEL: 7.2 mg/m ³	
Magnesium stearate 557-04-0			: 5 mg/m ³	-			-	

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration No information available. **(PNEC)**

8.2. Exposure controls

Personal protective equipment	
Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product.
Environmental exposure controls	No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state Solid Appearance tablet Colour dark violet Odour Odourless. **Odour threshold** No information available Remarks • Method Property Values No data available Melting point / freezing point None known Boiling point / boiling range No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known No data available Upper flammability or explosive limits Lower flammability or explosive No data available limits No data available Flash point None known No data available Autoignition temperature None known **Decomposition temperature** None known 9.4 pН None known No data available No information available pH (as aqueous solution) Kinematic viscosity No data available None known Dynamic viscosity No data available None known Water solubility No data available None known No data available Solubility(ies) None known **Partition coefficient** No data available None known Vapour pressure No data available None known **Relative density** No data available None known **Bulk density** No data available Liquid Density No data available **Relative vapour density** No data available None known **Particle characteristics Particle Size** No information available **Particle Size Distribution** No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes

SECTION 10: Stability and reactivity

Not applicable

9.2.2. Other safety characteristics No information available

10.1. Reactivity				
Reactivity	No information available.			
10.2. Chemical stability				
Stability	Stable under normal conditions.			
Explosion data Sensitivity to mechanical impac Sensitivity to static discharge	t None. None.			
10.3. Possibility of hazardous react	ions			
Possibility of hazardous reactions	None under normal processing.			
10.4. Conditions to avoid				
Conditions to avoid	Excessive heat.			
10.5. Incompatible materials				
Incompatible materials	None known based on information supplied.			
10.6. Hazardous decomposition products				

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Coughing and/ or wheezing.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	1,571.30 mg/kg
ATEmix (dermal)	2,015.90 mg/kg
ATEmix (inhalation-dust/mist)	4.22 mg/l

Unknown acute toxicity

15.01 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

36.83 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Cellulose	> 5 g/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5800 mg/m³(Rat)4 h
Lithium hydroxide monohydrate	= 120 mg/kg (Rat)		= 0.96 mg/L (Rat)4 h
Silica, amorphous	= 7900 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2.08 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SECTION 12: Ecological information			
Other adverse effects	No information available.		
11.2.2. Other information			
Endocrine disrupting properties	No information available.		
11.2.1. Endocrine disrupting properties			
11.2. Information on other hazards			
Aspiration hazard	No information available.		
STOT - repeated exposure	No information available.		
STOT - single exposure	No information available.		
Reproductive toxicity	No information available.		
Carcinogenicity	No information available.		
Germ cell mutagenicity	No information available.		
Respiratory or skin sensitisation	No information available.		
Serious eye damage/eye irritation	No information available.		
Skin corrosion/irritation	No information available.		

12.1. Toxicity

Ecotoxicity

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Silica, amorphous	EC50: =440mg/L (72h, Pseudokirchneriella subcapitata)	LC50: =5000mg/L (96h, Brachydanio rerio)	-	EC50: =7600mg/L (48h, Ceriodaphnia dubia)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment	
Lithium hydroxide monohydrate	The substance is not PBT / vPvB	
Silica, amorphous	The substance is not PBT / vPvB PBT assessment does	
	not apply	

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information

Not regulated
Not regulated
Not regulated
Not applicable
None

IMDG	
14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special precautions for user	
Special Provisions	None No information available
14.7 Maritime transport in bulk	No information available
according to IMO instruments	
RID	
14.1 UN number or ID number	Not regulated
14.2	Notrogulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
<u>ADR</u>	
14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group 14.5 Environmental hazards	Not regulated
	Not applicable
14.6 Special precautions for user Special Provisions	None
	None

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Cellulose	RG 66	-
9004-34-6		
Silica, amorphous	RG 25	-
7631-86-9		

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

EU - Biocidal Product Regulation ((EU) 528/2012)

International Inventories	
TSCA	Complies
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection			
TŴĂ	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Method Used	
Calculation method	

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme Organisation for Economic Co-operation and Development Screening Information Data Set World Health Organization **Revision date** 11-30-2021

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet