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

Chloride Tablet Count

Revision date 11-29-2021 **Revision Number** 2

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

1.1. Product identifier

Product Code(s) TBSRCD

Product Name Chloride Tablet Count

Unique Formula Identifier (UFI) 15YD-KXM8-951X-THSD

Pure substance/mixture Mixture
Contains Chromic acid (H2CrO4), dipotassium salt, Potassium dichromate

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

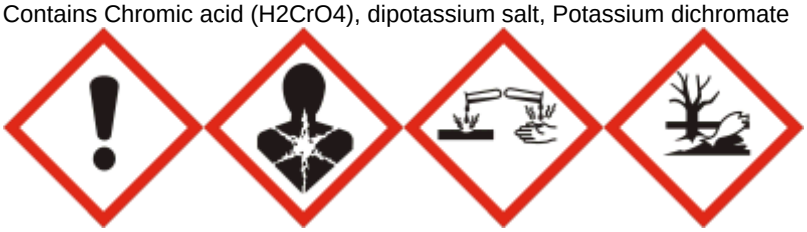
2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin corrosion/irritation	Category 1 Sub-category B - (H314)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitisation	Category 1 - (H317)
Germ cell mutagenicity	Category 1B - (H340)
Carcinogenicity	Category 1B - (H350i)
Reproductive toxicity	Category 1B - (H360FD)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

Contains Chromic acid (H2CrO4), dipotassium salt, Potassium dichromate



Signal word
Danger

Hazard statements
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H340 - May cause genetic defects
H350i - May cause cancer by inhalation
H360FD - May damage fertility. May damage the unborn child
H411 - Toxic to aquatic life with long lasting effects
EUH208 - Contains Potassium dichromate May produce an allergic reaction.

Precautionary Statements - EU (§28, 1272/2008)
P201 - Obtain special instructions before use
P260 - Do not breathe dust/fume/gas/mist/vapours/spray
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P321 - Specific treatment (see .? on this label)
P391 - Collect spillage

Additional information
This product requires tactile warnings if supplied to the general public. This product requires child resistant fastenings if supplied to the general public.

2.3. Other hazards

Toxic to aquatic life.

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	30-50	No data available	232-674-9	No data available			
Silver nitrate 7761-88-8	1-10	No data available	231-853-9	Skin Corr. 1B (H314) Aquatic Acute 1 (H400)			

				Aquatic Chronic 1 (H410) Ox. Sol. 2 (H272)			
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	1-10	No data available	232-140-5	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Muta. 1B (H340) Carc. 1B (H350i) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Skin Sens. 1 :: C>=0.5%		
Potassium dichromate 7778-50-9	<1	No data available	231-906-6	Acute Tox. 3 (H301) Acute Tox. 4 (H312) Acute Tox. 2 (H330) Skin Corr. 1B (H314) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Muta. 1B (H340) Carc. 1B (H350) Repr. 1B (H360FD) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Ox. Sol. 2 (H272)	STOT SE 3 :: C>=5%		
Lithium hydroxide monohydrate 1310-66-3	<1	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 9004-34-6	5000	2000	5.8		
Silver nitrate 7761-88-8	1173				
Potassium dichromate 7778-50-9	48	1150			
Lithium hydroxide monohydrate 1310-66-3	363		>6.15		
Silica, amorphous 7631-86-9	7900	5000	2.08		

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
Chromic acid (H2CrO4), dipotassium	7789-00-6	X

salt		
Potassium dichromate	7778-50-9	X

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin reaction.

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 immediate medical advice/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 contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. 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 Burning sensation. Itching. Rashes. Hives. May cause redness and tearing of the eyes. Coughing and/ or wheezing. Difficulty in breathing.

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

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitisation in susceptible persons. 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 The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

chemical	can lead to release of irritating gases and vapours. Product is or contains a sensitiser. May cause sensitisation by skin contact.

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 equipment and emergency procedures

Personal precautions	Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid generation of dust. Do not breathe dust.
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	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment 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 contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Remove contaminated clothing and shoes. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid generation of dust.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid breathing dust/fume/gas/mist/vapours/spray.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

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 9004-34-6	-	-	TWA: 10 mg/m³	-	TWA: 10 mg/m³ TWA: 4 mg/m³ STEL: 20 mg/m³
Silver nitrate 7761-88-8	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	-	TWA: 0.05 mg/m³ TWA: 0.5 mg/m³	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³
Potassium dichromate 7778-50-9	TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	Respiratory sensitizer Skin sensitizer	TWA: 0.05 mg/m³ TWA: 0.5 mg/m³	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³
Lithium hydroxide monohydrate 1310-66-3	-	-	-	-	STEL: 1 mg/m³
Silica, amorphous 7631-86-9	TWA: 0.1 mg/m³	TWA: 4 mg/m³	-	TWA: 0.1 mg/m³	-
Magnesium stearate 557-04-0	-	-	TWA: 10 mg/m³	-	-

Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Cellulose 9004-34-6	-	-	TWA: 1 mg/m³	TWA: 10 mg/m³	-
Silver nitrate 7761-88-8	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ Ceiling: 0.03 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ STEL: 0.03 mg/m³
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	-	TWA: 0.01 mg/m³ Ceiling: 0.1 mg/m³	TWA: 0.001 mg/m³	TWA: 0.01 mg/m³ TWA: 0.025 mg/m³ TWA: 2 mg/m³	TWA: 0.005 mg/m³
Potassium dichromate 7778-50-9	-	TWA: 0.01 mg/m³ Ceiling: 0.1 mg/m³	TWA: 0.001 mg/m³	TWA: 0.01 mg/m³ TWA: 0.025 mg/m³ TWA: 2 mg/m³	TWA: 0.005 mg/m³
Silica, amorphous 7631-86-9	-	TWA: 0.1 mg/m³ TWA: 4.0 mg/m³	-	TWA: 2 mg/m³	TWA: 5 mg/m³

Chemical name	France	Germany	Germany MAK	Greece	Hungary
Cellulose 9004-34-6	TWA: 10 mg/m³	-	-	TWA: 5 mg/m³	TWA: 3 mg/m³
Silver nitrate 7761-88-8	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ Peak: 0.02 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	TWA: 0.001 mg/m³ STEL: 0.005 mg/m³	-	*	TWA: 0.5 mg/m³ TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.5 mg/m³ TWA: 0.01 mg/m³ STEL: 2 mg/m³
Potassium dichromate 7778-50-9	TWA: 0.001 mg/m³ STEL: 0.005 mg/m³	-	*	TWA: 0.5 mg/m³ TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.5 mg/m³ TWA: 0.01 mg/m³ STEL: 2 mg/m³
Silica, amorphous 7631-86-9	-	TWA: 4 mg/m³	TWA: 4 mg/m³	TWA: 0.1 mg/m³	-

Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Cellulose	TWA: 10 mg/m³	TWA: 5.00 mg/m³	TWA: 10 mg/m³	TWA: 2 mg/m³	-

9004-34-6	STEL: 30 mg/m³				
Silver nitrate 7761-88-8	TWA: 0.01 mg/m³ STEL: 0.03 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.1 mg/m³ TWA: 0.01 mg/m³
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	TWA: 0.005 mg/m³ TWA: 0.01 mg/m³ TWA: 0.025 mg/m³ STEL: 0.15 mg/m³ STEL: 0.03 mg/m³ STEL: 0.075 mg/m³	-	TWA: 0.0002 mg/m³ STEL: 0.0005 mg/m³ *	TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³ TWA: 0.01 mg/m³	Sensitizer TWA: 0.005 mg/m³ STEL: 0.015 mg/m³
Potassium dichromate 7778-50-9	TWA: 0.005 mg/m³ TWA: 0.01 mg/m³ TWA: 0.025 mg/m³ STEL: 0.15 mg/m³ STEL: 0.03 mg/m³ STEL: 0.075 mg/m³	-	TWA: 0.0002 mg/m³ STEL: 0.0005 mg/m³ *	TWA: 0.005 mg/m³ TWA: 0.010 mg/m³ TWA: 0.025 mg/m³ TWA: 0.01 mg/m³	Sensitizer TWA: 0.005 mg/m³ STEL: 0.015 mg/m³
Lithium hydroxide monohydrate 1310-66-3	STEL: 1 mg/m³	-	-	-	-
Silica, amorphous 7631-86-9	TWA: 6 mg/m³ TWA: 2.4 mg/m³ STEL: 18 mg/m³ STEL: 7.2 mg/m³	-	-	TWA: 1 mg/m³	-
Magnesium stearate 557-04-0	TWA: 10 mg/m³ STEL: 30 mg/m³	-	TWA: 10 mg/m³ TWA: 3 mg/m³	-	TWA: 5 mg/m³

Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Cellulose 9004-34-6	-	-	-	-	TWA: 3 mg/m³
Silver nitrate 7761-88-8	TWA: 0.01 mg/m³	-	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ STEL: 0.03 mg/m³	TWA: 0.01 mg/m³
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	-	-	TWA: 0.001 mg/m³	TWA: 0.005 mg/m³ STEL: 0.015 mg/m³	TWA: 0.010 mg/m³ TWA: 0.01 mg/m³
Potassium dichromate 7778-50-9	-	-	TWA: 0.001 mg/m³	TWA: 0.005 mg/m³ STEL: 0.015 mg/m³	TWA: 0.010 mg/m³ TWA: 0.01 mg/m³
Silica, amorphous 7631-86-9	-	-	TWA: 0.75 mg/m³	TWA: 1.5 mg/m³ STEL: 3 mg/m³	-

Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Cellulose 9004-34-6	TWA: 10 mg/m³	TWA: 10 mg/m³	-	-	TWA: 10 mg/m³
Silver nitrate 7761-88-8	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³	TWA: 0.01 mg/m³ STEL: STEL mg/m³	TWA: 0.01 mg/m³
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	TWA: 0.5 mg/m³ TWA: 0.05 mg/m³	-	-	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.05 mg/m³ sensitizer
Potassium dichromate 7778-50-9	TWA: 0.5 mg/m³ TWA: 0.05 mg/m³	-	-	TWA: 0.010 mg/m³ TWA: 0.025 mg/m³	TWA: 0.05 mg/m³ sensitizer
Silica, amorphous 7631-86-9	-	-	-	TWA: 4 mg/m³	-
Magnesium stearate 557-04-0	TWA: 10 mg/m³	-	-	-	TWA: 10 mg/m³

Chemical name	Sweden	Switzerland	United Kingdom
Cellulose 9004-34-6	NGV: 2 mg/m³	TWA: 3 mg/m³	TWA: 10 mg/m³ TWA: 4 mg/m³ STEL: 20 mg/m³ STEL: 12 mg/m³
Silver nitrate 7761-88-8	NGV: 0.01 mg/m³ NGV: 0.1 mg/m³	TWA: 0.01 mg/m³ STEL: 0.02 mg/m³	TWA: 0.01 mg/m³
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	NGV: 0.005 mg/m³ Sensitizer	TWA: 0.005 mg/m³ H*	TWA: 0.01 mg/m³ TWA: 0.025 mg/m³ Capable of causing occupational asthma
Potassium dichromate	NGV: 0.005 mg/m³	TWA: 0.005 mg/m³	TWA: 0.01 mg/m³

7778-50-9	Bindande KGV: 0.015 mg/m³ Sensitizer	H*	TWA: 0.025 mg/m³ Capable of causing occupational asthma
Silica, amorphous 7631-86-9	-	TWA: 4 mg/m³	TWA: 6 mg/m³ TWA: 2.4 mg/m³ STEL: 18 mg/m³ STEL: 7.2 mg/m³
Magnesium stearate 557-04-0	NGV: 5 mg/m³	-	-

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	-	9 µg/L (blood - Ethylenediaminetetraacetic acid not provided) 12 µg/L (urine - spontaneous urine after end of work day, at the end of a work week/end of the shift) (-)	-	5 µg/g Creatinine - urine (Chromium) - single sample at the end of the work shift	-
Potassium dichromate 7778-50-9	-	9 µg/L (blood - Ethylenediaminetetraacetic acid not provided) 12 µg/L (urine - spontaneous urine after end of work day, at the end of a work week/end of the shift) (-)	-	5 µg/g Creatinine - urine (Chromium) - single sample at the end of the work shift	-

Chemical name	Denmark	Finland	France	Germany	Germany MAK
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	-	-	0.01 mg/g creatinine - urine (Total Chromium) - during shift 0.03 mg/g creatinine - urine (Total Chromium) - end of shift at end of workweek	0.6 µg/L - BAR (end of exposure or end of shift) urine	-
Potassium dichromate 7778-50-9	-	-	0.01 mg/g creatinine - urine (Total Chromium) - augmented during shift 0.03 mg/g creatinine - urine (Total Chromium) - end of shift at end of workweek	0.6 µg/L - BAR (end of exposure or end of shift) urine	-

Chemical name	Hungary	Ireland	Italy	Italy REL
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	-	25 µg/L (urine - total Chromium end of shift at end of workweek) 10 µg/L (urine - total Chromium increase	-	25 µg/L - urine (Total chromium) - end of shift at end of workweek 10 µg/L - urine (Total chromium) - increase

		during shift)		during shift
Potassium dichromate 7778-50-9	-	25 µg/L (urine - total Chromium end of shift at end of workweek) 10 µg/L (urine - total Chromium increase during shift)	-	25 µg/L - urine (Total chromium) - end of shift at end of workweek 10 µg/L - urine (Total chromium) - increase during shift

Derived No Effect Level (DNEL) No information available.
Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

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 contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid breathing dust/fume/gas/mist/vapours/spray.

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 beige
Odour Odourless.
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point	No data available	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
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	232 °C	None known
Decomposition temperature		None known
pH	7.0	None known
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known

Solubility(ies)	No data available	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
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods. Excessive heat.

10.5. Incompatible materials

Incompatible materials Acids. Bases. Oxidising agent.

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. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by

inhalation.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye irritation.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May cause sensitisation by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes. Hives. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral) 2,357.10 mg/kg
ATEmix (dermal) 2,079.30 mg/kg
ATEmix (inhalation-dust/mist) 1.89 mg/l

Unknown acute toxicity

55.57 % 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
Silver nitrate	= 1173 mg/kg (Rat)		
Potassium dichromate	= 48 mg/kg (Rat)	= 1150 mg/kg (Rabbit)	= 99 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

Skin corrosion/irritation Classification based on data available for ingredients. Causes burns.

Serious eye damage/eye irritation Classification based on data available for ingredients. Risk of serious damage to eyes. Causes serious eye irritation.

Respiratory or skin sensitisation May cause sensitisation by skin contact.

Germ cell mutagenicity Contains a known or suspected mutagen. Classification based on data available for ingredients. May cause genetic defects.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
Chromic acid (H2CrO4), dipotassium salt	Muta. 1B
Potassium dichromate	Muta. 1B

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Chromic acid (H2CrO4), dipotassium salt	Carc. 1B
Potassium dichromate	Carc. 1B

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Potassium dichromate	Repr. 1B

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity Contains 93.08 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Silver nitrate	-	LC50: 0.001339 - 0.001637mg/L (96h, Oncorhynchus mykiss) LC50: 0.00181 - 0.00214mg/L (96h, Pimephales promelas) LC50: 0.00452 - 0.00638mg/L (96h, Pimephales promelas) LC50: 0.00512 -	-	EC50: 0.0008 - 0.001mg/L (48h, Daphnia magna) EC50: 0.0008 - 0.0011mg/L (48h, Daphnia magna) EC50: =0.0006mg/L (48h, Daphnia magna)

		0.00787mg/L (96h, Poecilia reticulata) LC50: 0.0064 - 0.0106mg/L (96h, Pimephales promelas) LC50: 0.00839 - 0.1802mg/L (96h, Oncorhynchus mykiss) LC50: 0.009 - 0.02mg/L (96h, Lepomis macrochirus) LC50: 0.0242 - 0.0484mg/L (96h, Lepomis macrochirus) LC50: 0.05 - 0.07mg/L (96h, Lepomis macrochirus) LC50: =0.0027mg/L (96h, Cyprinus carpio) LC50: =0.0075mg/L (96h, Oncorhynchus mykiss) LC50: =0.009mg/L (96h, Pimephales promelas)		
Potassium dichromate	-	LC50: 113.6 - 155.7mg/L (96h, Lepomis macrochirus) LC50: 14 - 20.9mg/L (96h, Pimephales promelas) LC50: 15.41 - 30.36mg/L (96h, Pimephales promelas) LC50: 21.209 - 30.046mg/L (96h, Oryzias latipes) LC50: 23 - 41.2mg/L (96h, Poecilia reticulata) LC50: 24.81 - 34.55mg/L (96h, Poecilia reticulata) LC50: 65.6 - 137.6mg/L (96h, Lepomis macrochirus) LC50: =12.3mg/L (96h, Oncorhynchus mykiss) LC50: =320mg/L (96h, Lepomis macrochirus) LC50: >139mg/L (96h, Cyprinus carpio)	-	-
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
Silver nitrate	PBT assessment does not apply
Potassium dichromate	PBT assessment does not apply
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

IATA

14.1 UN number or ID number UN1759
14.2 UN proper shipping name Corrosive solid, n.o.s. (Silver nitrate, Potassium dichromate)
14.3 Transport hazard class(es) 8
14.4 Packing group II
Description UN1759, Corrosive solid, n.o.s. (Silver nitrate, Potassium dichromate), 8, II
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions A3, A803
ERG Code 8L

IMDG

14.1 UN number or ID number UN1759
14.2 UN proper shipping name Corrosive solid, n.o.s. (Silver nitrate, Chromic acid (H2CrO4), dipotassium salt)
14.3 Transport hazard class(es) 8
14.4 Packing group II
Description UN1759, Corrosive solid, n.o.s. (Silver nitrate, Chromic acid (H2CrO4), dipotassium salt), 8, II, Marine pollutant
14.5 Marine pollutant P
Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 274
EmS-No F-A, S-B No information available
14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number UN1759
14.2 UN proper shipping name Corrosive solid, n.o.s. (Silver nitrate, Potassium dichromate)

14.3 Transport hazard class(es)	8
14.4 Packing group	II
Description	UN1759, Corrosive solid, n.o.s. (Silver nitrate, Potassium dichromate), 8, II, Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274
Classification code	C10

ADR

14.1 UN number or ID number	UN1759
14.2 UN proper shipping name	Corrosive solid, n.o.s. (Silver nitrate, Potassium dichromate)
14.3 Transport hazard class(es)	8
14.4 Packing group	II
Description	UN1759, Corrosive solid, n.o.s. (Silver nitrate, Potassium dichromate), 8, II, (E), Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274
Classification code	C10
Tunnel restriction code	(E)

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 9004-34-6	RG 66	-
Chromic acid (H2CrO4), dipotassium salt 7789-00-6	RG 10,RG 10bis,RG 10ter	-
Potassium dichromate 7778-50-9	RG 10,RG 10bis,RG 10ter	-
Silica, amorphous 7631-86-9	RG 25	-

Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Carcinogens	Netherlands - List of Reproductive Toxins
Chromic acid (H2CrO4), dipotassium salt	Present	Present	Fertility Category 2 Development Category 1B
Potassium dichromate	Present	Present	Fertility Category 1B Can be harmful via breastfeeding Development Category 1B

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 contains one or more substance(s) subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Chromic acid (H2CrO4), dipotassium salt - 7789-00-6	72. 28. 29.	X
Potassium dichromate - 7778-50-9	72. 28. 29. 30.	X

Persistent Organic Pollutants
Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)
E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

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

Chemical name	EU - Biocidal Product Regulation ((EU) 528/2012)
Silver nitrate - 7761-88-8	Product-type 1: Human hygiene

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

Full text of H-Statements referred to under section 3
H272 - May intensify fire; oxidiser
H301 - Toxic if swallowed
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H315 - Causes skin irritation

H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H340 - May cause genetic defects
H350 - May cause cancer
H350i - May cause cancer by inhalation
H360FD - May damage fertility. May damage the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend
SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Carcinogenicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	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 11-29-2021

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

Disclaimer

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End of Safety Data Sheet