

SAFETY DATA SHEET

1 Identification of the substance or preparation and of the company/undertaking

1.1 Product identifier

Product Name: CHLORIDE TEST TABLETS

Datasheet Number: 739458-r 1. 0. 0

Product Part Number: 739458 (250 x 0.1 gram)
Head Office:: Wilhelmsen Ships Service AS

Address: Strandveien 20, N1324 Lysaker, Norway, Tel:(+47) 67584550

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

Reagent

1.3 Details of the supplier of the safety data sheet

Name of Supplier: For quotations contact your local Customer Services

Address of Supplier: Wilhelmsen Ships Service AS

Willem Barentszstraat 50 3165AB Rotterdam +31 4877 888 The Netherlands

Telephone: +31 4877 777

Fax:

Responsible Person: , Product HSE Manager, Tel.: +31 10 4877775 Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com

1.4 Emergency telephone number

-ONLY TO BE USED IN CASE OF AN INCIDENT-NCEC: +44 1865 407333, CHEMTREC (800) 424 9300

American Chemistry Council +1 703 527 3887,

Greece +30 210 7793777 Australia: +61 3 9630 0998

Giftinformasjonsentralen in Norway Tel.: +47 22591300

2 Hazards identification

- 2.1 Classification of the substance or mixture
 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
 - Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
 - Muta. 1B
 - Carc. 1B
 - Repr. 1B
 - Aquatic Chronic 2
 - Acute Tox. 4
 - Skin Irrit. 2
 - Skin Sens. 1

2 Hazards identification (....)

2.2 Label elements





- Symbols: T, N, GHS08, GHS09

Hazard phrases

- May cause genetic defects.
- May cause cancer.
- May damage fertility or the unborn child.
- Toxic to aquatic life with long lasting effects.
- Harmful if swallowed.
- Causes skin irritation.
- May cause an allergic skin reaction.

Precautionary Phrases

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF exposed or concerned: Get medical advice/attention.
- Store locked up.
- Disposal should be in accordance with local, state or national legislation

Risk Phrases

- Harmful by inhalation (R20)
- Irritating to eyes and skin (R36/38)
- May cause sensitisation by inhalation and skin contact (R42/43)
- May impair fertility (R60)
- May cause harm to the unborn child (R61)
- May cause cancer by inhalation (R49)
- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53)
- May cause cancer (R45)

Safety Phrases

- Avoid exposure obtain special instructions before use (S53)
- Keep container in a well ventilated place (S9)
- When using do not eat or drink (S20)
- Do not breathe dust (S22)
- Avoid contact with skin (S24)
- Wear suitable gloves (S37)
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45)
- Use appropriate containment to avoid environmental contamination (S57)

2.3 Other hazards

- Odour: Odourless
- Appearance: Tablets, beige, partly soluble in water

3 Composition/information on ingredients

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols
Silver nitrate	2.5-5%	7761-88-8	231-853-9	R8, R34, R50/53 H272, H314, H400 H410	O, C, N GHS03, GHS05, GHS09
Boric acid chromate	50-60%	10043-35-3	233-139-2	R60, R61 H360	T GHS08
Potassium dichromate	0.1-1%	7778-50-9	231-906-6	R8, R45, R46, R60, R61,R26, R25, R48/23, R21, R34, R42/43, R50/53 H334, H340, H350, H360, H372, H314 H400, H410, H312 H317	T, C, O, N GHS03, GHS06, GHS08, GHS05, GHS09
Potassium chromate	2.5-5%	7789-00-6	232-140-5	R49, R46, R36/37/38, R43, R50/53 H340, H350, H400 H410, H315, H319, H317, H335	T, Xi, N GHS08, GHS09, GHS07

Potassium dichromate: Carc. Cat. 2, Muta. Cat. 2,

Repr. Cat. 2

Potassium chromate : Carc. Cat. 2, Muta. Cat. 2, Boric acid

Repr. Cat. 2

*See Section 16

4 First aid measures

4.1 Description of first aid measures

- IF ON SKIN: Wash with plenty of soap and water.
- When in doubt or symptoms persist, seek medical attention

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Seek immediate medical attention
- Continue flushing with water until medical help arrives

- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

- Induce vomiting (only if patient is conscious)
- Never make an unconscious person vomit or drink fluids
- If vomiting occurs turn patient on side
- Give plenty of water to drink

4 First aid measures (....)

- Inhalation is unlikely to occur
- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- 4.2 Most important symptoms and effects, both acute and delayed
 - Causes eye irritation
 - Causes skin irritation.
 - The ingestion of significant quantities may cause damage to kidneys
 - The ingestion of significant quantities may cause damage to liver
 - The ingestion of significant quantities may cause gastro-intestinal disturbances
- 4.3 Indication of immediate medical attention and special treatment needed

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5 Fire-fighting measures

- 5.1 Extinguishing media
 - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- 5.2 Special hazards arising from the substance or mixture
 - Smoke from fires is toxic
- 5.3 Advice for firefighters
 - Substance evolves toxic fumes, wear self-contained breathing apparatus
 - Prevent run off water from entering drains if possible

6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Avoid raising dust
 - Wash thoroughly after dealing with spillage
 - Wear protective clothing as per section 8
- 6.2 Environmental Precautions
 - Do not allow to enter public sewers and watercourses
- 6.3 Methods and material for containment and cleaning up
 - Sweep or shovel-up spillage and remove to a safe place
- 6.4 Reference to other sections
 - None

7 Handling and storage

- 7.1 Precautions for safe handling
 - Restricted to professional users
 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 - Do not get in eyes, on skin, or on clothing.
 - Wash hands thoroughly after using this substance
 - Eyewash bottles should be available
 - Ensure adequate ventilation

7 Handling and storage (....)

- 7.2 Conditions for safe storage, including any incompatibilities
 - Keep in a cool, dry, well ventilated place
 - Keep container tightly closed and dry (S7/8)
 - Keep only in original container.
 - Protect from sunlight.
 - Protect from moisture
 - Recommended storage temperature between -5 and 20 °C
- 7.3 Specific end use(s)

8 Exposure controls/personal protection

- 8.1 Control parameters
 - TLV (TWA) 0.01 mg/m3 (Silver nitrate)
 - TLV (TWA) 0.02 mg/m3 (Potassium chromate (as Cr))
 - TLV (TWA) 0.02 mg/m3 (Potassium dichromate (as Cr))
- 8.2 Exposure controls
 - Engineering measures: Insofar as possible, work shoot be done in an enclosed space to prevent the release of substances and so as to prevent any ill effects. Alternative use a box with point extraction, stink cupboard or the like

Occupational exposure controls

- Wear nitrile gloves
- Wear goggles giving complete eye protection
- Wash hands thoroughly after using this substance







9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Odourless
 - Appearance: Tablets, beige, partly soluble in water
 - pH 7.1 at 0.18 % concentration
 - Boiling point not applicable
 - Partially soluble in water
 - Density 1.838 g/cm3 at 20 deg C
 - Non-combustible solid

9.2 Other information

- No information available

10 Stability and reactivity

10 Stability and reactivity (....)

10.1 Reactivity

- This article is considered stable under normal conditions
- Reacts with acid

10.2 Chemical stability

- This article is considered stable under normal conditions

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Avoid contact with acid

10.5 Incompatible materials

- Contact with metals liberates flammable gas
- Incompatible with reducing agents
- Incompatible with organics
- Incompatible with combustible material

10.6 Hazardous Decomposition Products

- No hazardous decomposition products known

11 Toxicological information

11.1 Information on toxicological effects

- LD50, oral rat, silvernitrate: 1173 mg/kg
- LD50, oral mouse, potassium chromate: 180 mg/kg
- LD50, oral rat, potassium dichromate: 25 mg/kg
- May impair fertility (R60)

Inhalation

- Not regarded as a potential route of exposure.
- May cause irritation
- May cause coughing
- May cause sensitisation by inhalation (R42)

Contact with skin

- May cause irritation
- May cause sensitisation by skin contact (R43)

Contact with eyes

- Causes redness and irritation

Ingestion

- The ingestion of significant quantities may cause damage to kidneys
- The ingestion of significant quantities may cause damage to liver
- The ingestion of significant quantities may cause gastro-intestinal disturbances

Carcinogenicity

- Potassium chromate + Potassium dichromate :
- Category 2 Carcinogen

11 Toxicological information (....)

Mutagenicity

- Potassium chromate + Potassium dichromate :
- Category 2 Mutagen
- May cause heritable genetic damage (R46)

12 Ecological information

- 12.1 Toxicity
 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53)
- 12.2 Persistence and degradability
 - Its main ingredients will either dissolve rapidly and dissociate in water or are readily/inherently biodegradable.
 - Toxic to sewage works organisms
- 12.3 Bioaccumulation Potential
 - No information available
- 12.4 Mobility in soil
 - Partially soluble in water.
- 12.5 Results of PBT and vPvB assessment
- 12.6 Other Adverse Effects

13 Disposal considerations

- 13.1 Waste treatment methods
 - Do not discharge into drains or the environment, dispose to an authorised waste collection point
 - Disposal should be in accordance with local, state or national legislation

Classification

- EU Waste class: 16.05.06 / 16.09.02

14 Transport information







ENVIRONMENTALLY HAZARDOUS

- 14.1 UN Number
 - UN3288
- 14.2 UN Proper Shipping Name
 - Toxic solid, inorganic, n.o.s. (potassium chromate, potassium dichromate)
- 14.3 Transport hazard class(es)
 - 6.1

14 Transport information (....)

- 14.4 Packing group
 - 111
- 14.5 Environmental hazards
 - Marine pollutant
- 14.6 Special precautions for user
 - No special precautions are required for this product
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
 - Not applicable

Other information

Road/Rail (ADR/RID)

Proper Shipping Name: Toxic solid, inorganic, n.o.s. (potassium chromate,

potassium dichromate)

ADR UN No.: UN3288 ADR Hazard Class: 6.1 ADR Packing Group: III ADR subrisk: -

ADR Flashpoint: -

Sea (IMDG)

Proper Shipping Name: Toxic solid, inorganic, n.o.s. (potassium chromate,

potassium dichromate) MAR. POL

IMDG UN No.: UN3288 IMDG Hazard Class.: 6.1 IMDG Pack Group.: III IMDG EmS: F-A, S-A

IMDG subrisk: - IMDG Flashpoint: -

Air (ICAO/IATA)

Proper Shipping Name: Toxic solid, inorganic, n.o.s. (potassium chromate,

potassium dichromate)

ICAO Un No.: UN3288 ICAO Hazard Class.: 6.1 ICAO Packing Group.: III ICAO subrisk: -

ICAO Flashpoint:

DOT / CFR (US Department of Transportation)

DOT Proper Shipping Name: Toxic solid, inorganic, n.o.s. (potassium chromate,

potassium dichromate)

Hazardous Material: potassium chromate,

potassium dichromate,

Boric acid

Hazard Class: 6.1 Identification Number: UN3288

Product RQ (lbs): - DOT subrisk: -

DOT Flashpoint:

15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - SUBSTANCES OF VERY HIGH CONCERN (SVHC) ACCORDING TO REACH, ARTICLE 57:
 - CAS 7789-006, potassium chromate CAS 7778-50-9, potassium dichromate CAS100043-35-3, boric acid

15 Regulatory information (....)

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- This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)
- This Safety Data Sheet has been prepared in accordance with article 31 and annex II in REACH and Directive 453/2010/EU.
- Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations

15.2 Chemical Safety Assessment

None

16 Other information

Text of R and S phrase codes used in this safety data sheet:- H272: May intensify fire; oxidizer.; 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.; 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.; H360: May damage fertility or 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.; R21: Harmful in contact with skin; R25: Toxic if swallowed; R26: Very toxic by inhalation; R34: Causes burns; R36/37/38: Irritating to eyes, respiratory system and skin; R42/43: May cause sensitisation by inhalation and skin contact; R43: May cause sensitisation by skin contact; R45: May cause cancer; R46: May cause heritable genetic damage; R48/23: Toxic: danger of serious damage to health by prolonged exposure through inhalation; R49: May cause cancer by inhalation; R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment; R60: May impair fertility; R61: May cause harm to the unborn child; R8: Contact with combustible material may cause fire.

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer

The most up-to-date version of this MSDS can be found on www.wilhelmsen.com/shipsservice

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

For addresses of other Wilhelmsen Ships Service offices, please refer to www.wilhelmsen.com/shipsservice

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16 Other information (....)

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