

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 1 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

1 Identification of the substance/mixture and company/undertaking

1.1 Product identifier

CHLORIDE		
Product Name	CL 120	CL 250
Catalog Number	XSYS0008	BLT00033
Reagent 1	10 x 12 ml	1 x 250 ml
Calibrator	-	1 x 5 ml

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

The sets are designed for Health Service laboratories for determination of chloride concentration in serum and plasma. The mixture is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Name or trade name of manufacturer: Erba Lachema s.r.o.
Place of business: Brno, Karásek 1d, postcode 621 00
ID no.: 26918846
Phone: +420 517 077 579
Fax: +420 517 077 077
Qualified person: Ing. Pavel Filka
E-mail: filka@erbalachema.com
Phone: +420 517 077 556

1.4 Emergency telephone number

Erba Lachema s.r.o.

Phone: +420 517 077 556 (*service only during business hours*)

Toxicological Information Centre (TIS), Na Bojišti 1, 128 01 Prague 2

Phone: +420 224 919 293 or +420 224 915 402 (*service available 24 hours a day*)

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 2 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

2 Hazards Identification

2.1 Classification of the mixture

Reagent 1

The reagent 1 of the kit **Chloride is classified** as dangerous according to EU Directives 1999/45/EC as amended

Xn, Harmful; **R 20/21/22** Harmful by inhalation, in contact with skin and if swallowed.
 R 68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

2.2 Label elements

Xn



Symbols:

Harmful

Risk phrases (R):

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Safety phrases (S):

S 7 Keep container tightly closed.

S 36/37 Wear suitable protective clothing and gloves.

S 38 In case of insufficient ventilation, wear suitable respiratory equipment.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013	Date of review:	Page 3 of 11 pages	Version: 1
--------------------------	-----------------	--------------------	------------

Name of the mixture: **CHLORIDE**

3 Composition/information on ingredients

3.1 Composition

The reagent 1 contains the following hazardous substances:

Substance name	Content (% of weight)	CAS number	EC number	Classification according to (EC) No. 67/548 EEC
				Classification according to (EC) No. 1272/2008
Mercury(II) thiocyanate	< 0,04%	592-85-8	209-773-0	T+, N; R 26/27/28-33-50/53; S 13-28-45-60-61 Acute Tox. 2, Acute Tox. 1, Stot se 2 ,Aquatic Acute 1, Aquatic Chronic 1; H300, H310, H330 H373, H410; P260, P264, P273, P280, P284, P301+P310
Mercury(II) nitrate	< 0,01 %	7783-34-8	233-152-3	T+, N; R26/27/28-33-50/53; S 13-28-45-60-61 Acute Tox. 1; Acute Tox. 2; Aquatic Acute 1; H300, H310, H330, H400; P260, P264, P273, P280, P284 P302+P350, P321, P405, P501
Iron(III) nitrate	1,5 %	7782-61-8	233-899-5	O, Xi; R 8-36/37/38 S: 17-26-36 Ox. Sol. 3, Skin Irrit. 2, Eye Irrit. 2 STOT SE 3; H220, H272, P261, P305+P351+P338,
Nitric acid	< 0,6 %	7697-37-2	231-714-2	O, C; R 8 - R35; S: 23-26-36-45 Ox. Liq. 3; Skin Corr. 1A; H314, H272; P210, P260, P280 P301+P310, P307+311
Methanol	6 %	67-56-1	200-659-6	F, T; R11-23/24/25-39/23/24/25; S: 7-16-36/37-45 Flam. Liq. 2; STOT SE 1; Acute Tox. 3; H225, H301, H311, H331, H370; P210, P221, P305+P351+P338, P303+361+353

*) Substance with exposure limits (exposure limits are listed in Chapter 8.1)

For a full text of R-phrases and S-phrases see Section 16.

4 First aid measures

4.1 Description of first aid measures

When working with the mixture, take care of personal hygiene and prevent contamination of work clothing and skin. If you have any doubts or when symptoms persist, seek medical attention.

Exposure by inhalation

Discontinue the exposure, remove casualty to fresh air, keep at rest and seek medical advice.

Exposure by contact with skin

Take off all contaminated clothing. After contact with skin, wash immediately with soap and water.

Exposure by contact with eyes

Rinse an open eye (hold eyelids with fingers) with plenty of water for about 15 minutes, transfer casualty to a specialist.

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 4 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

Exposure by ingestion

Rinse mouth with water, drink 1/2 l of lukewarm water, seek medical attention immediately, do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

The mixture is not flammable, the measure should be adapted to burning substances in the surrounding area.

Unsuitable extinguishing media

None known.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Protective clothing, breathing apparatus.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment, see item 8. Observe the principles of work safety in chemical laboratories. Do not eat, drink or smoke.

6.2 Environmental precautions

Do not discharge into the drains, surface waters, groundwater.

6.3 Methods and material for containment and cleaning up

Absorb spilled agent with a suitable inert material (sand, earth, vapex) and store contaminated material in containers for collection of hazardous waste. For waste disposal see item 13.

Sweep solid reagent and store in containers for collection of hazardous waste. For waste disposal see item 13.

7 Handling and storage

7.1 Precautions for safe handling

Observe the principles of work in laboratory. Observe the normal operating procedures for handling chemical substances and mixtures. Do not eat, drink or smoke. Use personal protective equipment, see item 8.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed containers at a temperature between +2°C and +8°C.

7.3 Specific end use

The kit is designed for in vitro diagnostic devices.

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 5 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

8 Exposure controls/personal protection

8.1 Exposure limit values

Control parameters of the mixture components according to Government Decree No. 361/2007 Coll.

No data Available

Exposure limit values in the workplace according to Directive No. 2006/15/EC

No data Available

Limit values for indicators of biological exposure tests in urine for the product according to Decree No. 432/2003 Coll.

No data Available

8.2 Exposure controls

8.2.1 Appropriate engineering controls

None

8.2.2 Personal protective equipment

- A) Respiratory protection: Not required with adequate ventilation, otherwise breathing apparatus.
- B) Hand protection: Protective gloves - rubber, resistant to caustic substances.
- C) Eye protection: Safety goggles.
- D) Skin protection: Protective clothing:

8.2.3 Environmental exposure controls

To eliminate the emergency conditions, have pre-prepared a decontamination mixture and appropriate collection vessels for reaction residues. Dispose of reaction residues and decontaminated mixtures as hazardous waste water in accordance with relevant legal regulations.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Reagent 1

- a. Appearance..... Clear yellow liquide
- b. Odour..... no data available
- c. Odour Threshold no data available
- d. pH (při 20°C) <2
- e. Melting point / freezing point..... no data available
- f. Initial boiling point and boiling range (°C) no data available
- g. Flash point (°C) no data available
- h. Evaporation rate no data available
- i. Flammability (solid, gas)..... no data available
- j. Upper/lower flammability or explosive limits no data available
- k. Vapour pressure (hPa)..... no data available
- l. Vapour density no data available
- m. Relative density (kg.m-3)..... no data available
- n. Water solubility no data available
- o. Partition coefficient: n- octanol/water..... no data available

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 6 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

- p. Autoignition temperature (°C) no data available
- q. Decomposition temperature (°C) no data available
- r. Viscosity no data available
- s. Explosive properties no data available
- t. Oxidizing properties no data available

Standard (Calibrator)

- a. Appearance Clear colorless liquide
- b. Odour no data available
- c. Odour Threshold no data available
- d. pH (při 20°C) no data available
- e. Melting point / freezing point no data available
- f. Initial boiling point and boiling range (°C) no data available
- g. Flash point (°C) no data available
- h. Evaporation rate no data available
- i. Flammability (solid, gas) no data available
- j. Upper/lower flammability or explosive limits no data available
- k. Vapour pressure (hPa) no data available
- l. Vapour density no data available
- m. Relative density (kg.m-3) no data available
- n. Water solubility no data available
- o. Partition coefficient: n- octanol/water no data available
- p. Autoignition temperature (°C) no data available
- q. Decomposition temperature (°C) no data available
- r. Viscosity no data available
- s. Explosive properties no data available
- t. Oxidizing properties no data available

10 Stability and reactivity

Under normal conditions of use and storage the mixture is stable.

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid exposure to heat of solar radiation

10.5 Incompatible material

Heavy Metals, strong oxidizing agents and strong acids

10.6 Hazardous decomposition products

Nitrogen oxide and carbon

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 7 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

11 Toxicological information

11.1 Acute toxicity

Human oral LD₅₀ (g.kg⁻¹)..... not applicable
Rat oral LD₅₀ (g.kg⁻¹)..... not applicable
Rat inhalation LD₅₀ (g.kg⁻¹) not applicable
Rat inhalation TLS (g.kg⁻¹) not applicable

11.2 Skin corrosion/irritation

Not applicable.

11.3 Serious eye damage/eye irritation

Not applicable.

11.4 Respiratory or skin sensitization

Not applicable.

11.5 Germ cell mutagenicity

Not applicable.

11.6 Carcinogenicity

Not applicable.

11.7 Reproductive toxicity

Not applicable.

11.8 Specific target organ toxicity - single exposure

Not applicable.

11.9 Specific target organ toxicity - repeated exposure

Not applicable.

11.10 Aspiration hazard

Not applicable.

12 Ecological information

12.1 Ecotoxicity

Waste water

LC₅₀ 96 hrs, fish (mg.kg⁻¹) not applicable
EC₅₀ 48 hrs, daphnia (mg.kg⁻¹) not applicable
IC₅₀ 72 hrs algae (mg.kg⁻¹) not applicable
CHSK not applicable
BSK₅..... not applicable

12.2 Persistence and degradability

Not applicable.

12.3 Bioaccumulative potential

Not applicable.

12.4 Mobility in soil

Not applicable.

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 8 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

Not applicable.

13 Disposal considerations

13.1 Waste treatment methods

Dispose of in compliance with applicable regulations for hazardous waste management. Incinerate residues of the mixture in a hazardous waste incinerator.

Contaminated packaging must be treated as hazardous waste. Dispose of by incinerating in a hazardous waste incinerator.

14 Transport information

Not governed by regulations for transport of dangerous goods (ADR).

14.1 UN number

ADR/RID:

IMDG:

IATA:

14.2 UN proper shipping name

ADR/RID:

IMDG:

IATA:

14.3 Transport hazard class(es)ADR/RID:

IMDG:

IATA:

14.4 Packaging group

ADR/RID:

IMDG:

IATA:

14.5 Environmental hazards

ADR/RID:

IMDG:

IATA:

14.6 Special precautions for user

No data available

15 Regulatory Information

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

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

no data available

15.2 Chemical Safety

no data available

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 9 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

16 Further information

List of R-phrases

R11 Highly flammable.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R 8 Contact with combustible material may cause fire.

R36/37/38 Irritating to eyes, respiratory system and skin.

R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R33 Danger of cumulative effects.

R35 Causes severe burns.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of H-phrases:

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

H314 Causes severe skin burns and eye damage.

H272 May intensify fire; oxidiser.

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H330 Fatal if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

List of P-phrases:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P220 Keep/Store away from clothing/ combustible materials.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

P284 Wear respiratory protection.

P307 + P311 IF exposed: Call a POISON CENTER or doctor/physician.

P302 + P350 IF ON SKIN: Gently wash with plenty of soap and water.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 10 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P303+3061+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

List of S-phrases:

S7 Keep container tightly closed.

S16 Keep away from sources of ignition - No smoking.

S36/37 Wear suitable protective clothing and gloves.

S17 Keep away from combustible material.

S23 Do not breathe gas/fumes/vapour/spray.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

S13 Keep away from food, drink and animal feedingstuffs.

S28 After contact with skin, wash immediately with plenty of soap and water.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Training instructions

Workers who come into contact with hazardous materials shall be acquainted by the organization, to a necessary extent, with the effects of these substances, with the methods how to treat them, with protective measures, the principles of first aid, necessary sanitation procedures and procedures for liquidation of failures and accidents. Under Article 35 of the European Parliament and Council Regulation (EC) No. 1907/2006, the employer must enable employees or their representatives access to information from the safety data sheet of the substance or mixture the worker uses or the effects of which can be exposed to during his/her work.

Recommended restrictions on use

The mixture is intended for professional use. It should not be used for purposes other than those listed under 1.2.

Further information

Information given is based on our best knowledge and is intended to describe the product for the purposes of safety of transporting and handling only. It should not be therefore construed as guaranteeing any specific property of the product. It is the responsibility of the user to observe all current regulations and consider recommendations on the use of application of product.

Declaration

The safety data sheet contains basic data corresponding to the present state of our knowledge and experience, in accordance with applicable regulations. The foregoing information was gathered with the utmost care, but that does not mean that it is complete and should be used as the only correct information. Erba Lachema s.r.o. is not responsible for any damages caused by improper use and handling of the mixture.

Safety Data Sheet

according to the European Parliament and Council Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II

Date of issue: 1.2. 2013

Date of review:

Page 11 of 11 pages

Version: 1

Name of the mixture: **CHLORIDE**