SAFETY DATA SHEET

POTASSIUM CHLORIDE

Section 1: Chemical Product and Company Identification

1.1 Product identifier

Product Name: Potassium chloride

Material No. 9028XXXXXXXXX

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

Relevant identified uses: Food, pharma, technical

1.3 Details of the supplier of the safety data sheet

CHEMICAL ELEMENTS UKRAINE, LLC
Khimikov avenue, 74, Cherkassy, 18028, Ukraine
+38 0472 59 02 28
hello@chemelements.life
www.chemelements.life

1.4 Emergency telephone number

+49 40 333 13 237

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union legislation.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Section 3: Composition and Information on Ingredients

3.1 Sunstance

Chemical name: Potassium chloride

Formula: KCl

CAS No. 7447-40-7

EC No. 231-211-8

3.2 Hazardous components (REGULATION (EC) No 1272/2008)

Component	CAS No.	WP, %
Potassium chloride	7447-40-7	99,0-101,0

3.5 Mixture

Not applicable

Section 4: First Aid Measures

4.1 Description of first aid measures

Inhalation: If breathing is disturbed, give moistened oxygen, while breathing stops, give artificial respiration.

Ingestion: To clear an oral surface of the remains of substance. Rinse your mouth, drink plenty of water with water (240-300 ml), give activated charcoal, saline laxative. Do not induce vomiting!

Skin: Remove and remove contaminated clothing, shoes, equipment. Rinse thoroughly with running water until the substance is completely removed.

Eye contact: Rinse with plenty of water with an open palpebral fissure for at least 5 minutes.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: In acute poisoning, it causes short-term agitation, followed by depression, decreased motor activity, sore throat, cough, respiratory rhythm disturbance, abdominal pain, diarrhea. Potassium chloride causes irritation of the skin.

4.3 Indication of any immediate medical attention and special treatment needed

No information available

Section 5: Fire fighting measures

5.1 Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Toxic hydrogen chloride / or chlorine gases, potassium oxide and other toxic gases.

5.3 Advice for firefighters

Use sprayed water to precipitate thermal decomposition and evaporation products, to absorb heat. In a fire situation, wear self-contained positive pressure breathing apparatus and protective clothing from resistant materials.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation and ingestion. Avoid contact with skin, eyes and clothing. Wear protective clothing specified for normal operations (see Section 8).

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

Substance collect in a closed identified container, using a dry method. Avoid dust. Wash off contaminated surface with water and detergents. Do not allow to enter waste water drain.

6.4 Reference to other sections

Disposal (see Section 13).

Section 7: Handling and Storage

7.1 Precautions for safe handling

Change contaminated clothing immediately; wash hands and face after handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry (hygroscopic substance), closed, ventilated warehouse in the original tightly closed packaging.

7.3 Specific end use(s)

Food, pharma, technical.

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Provide adequate ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits. The level of protection and types of controls will vary depending upon potential exposure conditions.

8.2 Exposure controls

Eye/face protection:	Safety glasses with side-shields.
Skin and body protection:	Wear suitable protective clothing (protective gloves, dustproof clothing and special footwear). Recommended Glove material: Nitrile rubber 0,11 mm.
Respiratory Protection:	Respiratory protection necessary at: Dust formation. Recommended Filter type: Filter P1.

Section 9: Physical and Chemical Properties

Form:	Solid
Appearance:	White crystals or powder
Odour:	Odourless.
Melting Point:	773°C
Boiling point:	1413^{0}C
Decomposition temperature:	No information available
Solubility in Water:	330 g/l (20°C)
Solubility in Organic Solvents:	Slightly soluble in alcohol. Not soluble in acetone, diethyl ether. Moderately soluble in glycerol, alkalis.
Specific Gravity:	1,989 g/cm^3
pH:	pH 5,5-8,5 (50 g/l, H_2O, 20 °C)
Flammability:	Non-combustible material.
Molecular Weight:	74,56
Partition coefficient: n-octanol/water:	Log P(oct)=-0,46
Vapor pressure:	Does not form fumes (dust or fog from solutions)

Section 10: Stability and Reactivity Data

10.1 Reactivity

Reacts with acids and alkalis, silver salts, lead. The substance is hygroscopic.

10.2 Chemical stability

The substance is chemically stable under standard environmental conditions.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Dust generation. Moisture. Incompatibles.

10.5 Incompatible materials

Organic substances, acids and alkalis, silver salts, lead. Potassium chloride is rapidly destroyed by bromine trifluoride.

10.6 Hazardous decomposition products

See 5.2

Section 11: Toxicological Information

Acute Toxicity:	LD_{50} (oral rat)= 2430-2600 mg/kg; LD_{50} (oral mouse)=383-1500 mg/kg.
Inhalation:	No information available
Skin:	Yes (rat, hyperimia)
Eye:	Yes (rabbit, standard Draise test 500 mg / 24 h, weak effect)
Carcinogenicity:	No information available
Mutagenicity:	Yes. (cytogenetic analysis, hamster lungs, mitosis disorder: S. cerevisiae: sister chromatid exchange, hamster egg). According to other sources: the substance does not act like a mutagen. It is believed that the positive results obtained with short-term tests are the result of an osmotic effect, not mutagenicity.
Reproductive toxicity:	No information available
Specific target organ toxicity - single exposure:	No information available
Specific target organ toxicity - repeated exposure:	No information available
Aspiration hazard:	No information available
Systemic effects:	See 4.2

Section 12: Ecological Information

12.1 Acute toxicity

For fish: Lepomis macrochirus) (blue gill) – 96 hour - LC_{50} = 2010 mg/l
For Daphnia magna: 72-96 hours - LC_{50} = 29–117 mg/l
For algae: (Nitzschia linearis) diatom) - 5 days - 120 hour LC_{50}=1337 mg/l; (Scendesmus subspicatus) 72 hour - EC_{50} = 2500 mg/l.

12.2. Persistence and degradability

Stability under abiotic conditions (τ1 / 2): > 30 days (extremely stable). Products of transformation in the environment- No information available.

12.3 Bioaccumulative potential

No information available

12.4. Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Other adverse effects

No information available

Section 13: Disposal Considerations

Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

Section 14: Transport Information

14.1 UN number

Not dangerous goods

14.2 UN proper shipping name

Not dangerous goods

14.3 Transport hazard class(es)

Land transport (ADR/RID):	Not classified as dangerous in the meaning of transport regulations
Air transport (IATA):	Not classified as dangerous in the meaning of transport regulations
Sea transport (IMDG):	Not classified as dangerous in the meaning of transport regulations

14.4 Packaging group:

Not dangerous goods

Section 15: Other Regulatory Information

Chemical Safety Assessment: No information

Section 16: Other Information

Revision date: May, 2020

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.