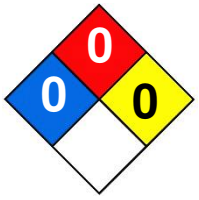

Material Safety Data Sheets

Revision 2

1. IDENTIFICATION

Product Name	**Potassium chloride**
Other Names	potassium salt; Sylvite
Uses	Suitable for use in all food industries and pharmaceutical industry.
Chemical Family	No Data Available
Chemical Formula	KCl
Chemical Name	Potassium chloride
Product Description	No Data Available

Company	**Arman sina.co**
Contact Information	info@armansina.com **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Classification	NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)
Signal Word	None
Hazard Statements	No Data Available
Symbol	No Data Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Potassium chloride	KCl	7447-40-7	>=96 - 100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink plenty of water. Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
Eye	IF IN EYES: Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. If eye irritation persists, get medical advice/attention.
Skin	IF ON SKIN: Wash with plenty of mild soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention. Apply resuscitation if victim is not breathing - Administer oxygen if breathing is difficult.
Advice to Doctor	Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

Medical Conditions Aggravated by Exposure **No information available.**

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Non-combustible material.
Extinguishing Media	If material is involved in a fire, use extinguishing media appropriate to surrounding fire conditions.
Fire and Explosion Hazard	When heated to decomposition, may release poisonous and corrosive fumes.
Hazardous Products of Combustion	Fire may produce irritating, toxic, and/or corrosive fumes, including potassium oxides, chlorine and HCl.
Special Fire Fighting Instructions	Prevent entry into drains and waterways.
Personal Protective Equipment	Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Collect material (sweep or vacuum up) and place in suitable, properly labelled containers for possible reuse or disposal (see SECTION 13).
Containment	Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
Decontamination	Ventilate area and wash spill site after material pickup is complete.
Environmental Precautionary Measures	Prevent entry into drains and waterways.
Evacuation Criteria	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.

Personal Precautionary Measures **Use personal protective equipment as required (see SECTION 8).**

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust and aerosols. Avoid breathing dust/aerosols and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8).
Storage	Store in a cool, dry, and well-ventilated place, out of direct sunlight. Keep container tightly closed - check regularly for spills. Avoid exposure to moisture (hygroscopic). Keep away from incompatible materials (see SECTION 10).
Container	Keep in the original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No specific exposure standards are available for this product. For dusts from solid substances without specific occupational exposure standards: - Safe Work Australia Exposure Standard (Nuisance dusts): 8 hr TWA = 10 mg/m3 (measured as inhalable dust). - New Zealand WES (Particulates not otherwise classified): TWA = 10 mg/m3; TWA = 3 mg/m3 (respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Dust mask/particulate filter respirator (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or chemical safety goggles. - Hand protection: Handle with gloves. Recommended: Impervious protective gloves, e.g. Nitrile rubber. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Body covering clothes, e.g. overalls and safety shoes/boots.
Special Hazards Precaustions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling and before eating or smoking. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystals
Odour	None
Colour	White
pH	7
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	1,500 ° C (sublimation)
Melting Point	773 ° C
Freezing Point	No Data Available
Solubility	Soluble in water (28.1 g/100 ml)
Specific Gravity	1.987
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	>700 ° C
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	74.55 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible material.
Reactions That Release Gases or Vapours	**When heated to decomposition, may release poisonous and corrosive fumes, including potassium oxides, chlorine and** HCl.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	Reacts violently with BrF3 and sulfuric acid at 600° C.
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid generating dust. Avoid heating to decomposition.
Materials to Avoid	Incompatible/reactive with oxidising agents, bromine trifluoride, sulphuric acid, potassium permanganate.
Hazardous Decomposition Products	When heated to decomposition, may release poisonous and corrosive fumes, including potassium oxides, chlorine and HCl.
Hazardous Polymerisation	Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

General Information	Information on possible routes of exposure: - Ingestion: No adverse effects expected; large amounts may cause nausea, vomiting, abdominal pain, diarrhoea or constipation and may affect the salt level in blood (hyperkalemia). - Eye contact: Slightly irritating (Rabbit). - Skin contact: Non-irritant (Rabbit). Not a sensitiser. - Inhalation: Breathing in dust may result in respiratory irritation. Chronic effects: Not mutagenic by the Ames Test. Negative in DNA damage and repair assay (rat hepatocytes). Not classified (carcinogenic) by IARC, OSHA, EPA. No adverse effect were observed on fertility and/or development.
Acute	
Ingestion	Acute toxicity (Oral): - LD50, Rat: 2,600 mg/kg
Carcinogen Category	None

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic toxicity: - LC50, Fish (Fathead minnow): 880 mg/L (96 h). - LC50, Crustacea (Daphnia magna): 357 mg/L (48 h). - EC50, Crustacea (Daphnia magna): 141 mg/L (48 h). Aquatic toxicity: - LC50, Fish (Fathead minnow): 880 mg/L (96 h). - LC50, Crustacea (Daphnia magna): 357 mg/L (48 h). - EC50, Crustacea (Daphnia magna): 141 mg/L (48 h).
Persistence/Degradability	Biodegradation is not relevant for inorganic substance.
Mobility	Has a low sediment adsorption potential.
Environmental Fate	Prevent entry into drains and waterways.
Bioaccumulation Potential	Bioaccumulation is not likely to occur.
Environmental Impact	No Data Available

13. DISPOSAL CONSIDERATIONS

General Information	**Dispose of contents/container in a safe manner and in accordance with local/regional/national regulations. Normally suitable for disposal at approved land waste site.**
Special Precautions for Land Fill	**Containers can be recycled after proper cleaning.**

14. TRANSPORT INFORMATION

Land Transport)

Proper Shipping Name	**Potassium chloride**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
	No Data Available
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**
Comments	**NON-DANGEROUS GOODS: Not regulated for LAND transport.**

Sea Transport

Proper Shipping Name	**Potassium chloride**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**
EMS	**No Data Available**
Marine Pollutant	**No**
Comments	**NON-DANGEROUS GOODS: Not regulated for SEA transport.**

Air Transport

Proper Shipping Name	**Potassium chloride**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**
Comments	**NON-DANGEROUS GOODS: Not regulated for AIR transport.**

15. OTHER INFORMATION

Revision 2

Key/Legend

< Less Than
> Greater Than
AICS Australian Inventory of Chemical Substances
atm Atmosphere
CAS Chemical Abstracts Service (Registry Number)
cm² Square Centimetres
CO2 Carbon Dioxide
COD Chemical Oxygen Demand
deg C (° C) Degrees Celcius
deg F (° F) Degrees Farenheit
g Grams
g/cm³ Grams per Cubic Centimetre
g/l Grams per Litre
HSNO Hazardous Substance and New Organism
IDLH Immediately Dangerous to Life and Health
immiscible Liquids are insoluable in each other.
inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight