



Safety Data Sheet

Potassium Chloride

Version: 2

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1. Identification of the substance/mixture and of the company/undertaking

1.1 **Product identifier:** Potassium Chloride

Product code: 31144, 31164, 31264, 31274

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

Recommended use: Fertilizer, food additive or for pharmaceutical, industrial and laboratory applications.

Restriction on use: Use according to local regulations.

1.3 **Details of the supplier of the safety data sheet**

Company: Macco Organiques Inc.
100 Rue Mcarthur suite 112
Salaberry-de-Valleyfield, Québec
Canada, J6S 4M5
450 371-1066

1.4 **Emergency telephone number:** 450 371-1066

2. Hazards identification

2.1 **Classification of the substance or mixture**

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

See toxicological information, section 11

2.2 **Label elements**

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal word: NONE

Hazard statement(s)

This product is not a hazardous material.

Precautionary statements

Prevention

P264 Wash hands thoroughly after handling and any other part of the body that may have been exposed to the product.
P280 Wear protective gloves, protective clothing, eye and face protection.

Response

Not applicable

Storage

Not applicable

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.



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2.3 Other hazards:

No	CAS No :	Common name and synonyms	%	Toxicity	Persistence and degradability	Bioaccumulative potential
1	7447-40-7	Potassium chloride	100	No	Yes	No

Endocrine disruptors

No	CAS No :	Common name and synonyms	Health effects	Environmental effects
1	7447-40-7	Potassium chloride	No	No

3. Composition/information on ingredients

3.1 Substances

Common name	% (W/W)	Information
Potassium chloride	100	CAS No : 7447-40-7 EINECS Number : 231-211-8 Index No : N/A REACH Registration Number : N/A CLP Classification : N/A M Factor : 1

3.2 Mixtures

Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

4. First aid measures

4.1 Description of first aid measures: If swallowed, irritation, any type of overexposure or symptoms of overexposure occur during use of the product or persists after use, immediately contact a POISON CENTER, an EMERGENCY ROOM or a PHYSICIAN; ensure that the product safety data sheet is available.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention as soon as possible.

Skin contact: Remove contaminated clothing immediately. Wash the skin with soap and water. Thoroughly wet contaminated clothing.

Inhalation: Move exposed person to fresh air. Keep this person warm and lying down. Loosen tight clothing such as a collar, tie, belt or waistband. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed



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No known symptoms.
None known effect.

4.3 Indication of any immediate medical attention and special treatment needed: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Firefighting measures

5.1 Extinguishing media: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media: Jets of water can facilitate the spread of fire.

5.2 Special hazards arising from the substance or mixture: No specific hazard.

Hazardous combustion products: Hydrochloric acid.

5.3 Advice for firefighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel :

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

6.1.2 For emergency responders:

Equip the cleaning crew with adequate protection depending on the location of the product.

6.2 Environmental precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up:

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosionproof equipment. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections :

See section 1 for emergency contact information. See section 8 for information on appropriate personal protective equipment. See section 13 for more information on waste treatment.



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7. Handling and storage

7.1 Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

7.2 Conditions for safe storage, including any incompatibilities: Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Not applicable

Incompatibility: This product attacks stainless steel.

7.3 Specific end use(s): Not available

8. Exposure controls/personal protection

8.1 Control parameters

1 - National occupational exposure limit values

Substance	CAS No	Workplace exposure limit				Comments
		Longterm exposure limit (8-hr TWA reference period)		Shortterm exposure limit (15-minute reference period)		
		ppm	mg/m ³	ppm	mg/m ³	
Potassium chloride	7447-40-7	N/A	N/A	N/A	N/A	The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives

2 - Union occupational exposure limit values

EINECS Number	CAS No	Common name and synonyms	8-hour TWA		15-minute occupational exposure limit (STEL)		Notes
			ppm	mg/m ³	ppm	mg/m ³	
231-211-8	7447-40-7	Potassium chloride	N/A	N/A	N/A	N/A	N/A



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3 - US occupational exposure limit values

EINECS Number	CAS No	Common name and synonyms	IDLH NIOSH	Regulatory Limits			Recommended Limits	
				OSHA PEL		California / OSHA PEL	NIOSH REL	ACGIH ® 2019 TLV ®
				ppm	mg/m ³	8-hour TWA (ST) STEL (C) Ceiling	Up to 10-hour TWA (ST) STEL (C) Ceiling	8-hour TWA (ST) STEL (C) Ceiling
231-211-8	7447-40-7	Potassium chloride	N/A	N/A	N/A	N/A	N/A	N/A

IDLH: Immediately Dangerous to Life or Health Concentrations

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limits

California / OSHA: California Division of Occupational Safety and Health

REL: Recommended Exposure Limits

ACGIH ®: American Conference of Governmental Industrial Hygienists

TLV ®: Threshold Limit Values

8.2 Exposure controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes: DO NOT WEAR CONTACT LENSES. Wear anti-splash safety goggles.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.

Respiratory: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Others: Wear protective clothing with long sleeves and appropriate safety shoes at all times.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Solid

Colour: White

Odour: None

Melting point/freezing point: 773 °C (1423.4 °F)

Initial boiling point/boiling range: 1411 °C (2571.8 °F)

Flammability: Not applicable

Lower flammable/explosive limit: Not applicable

Upper flammable/explosive limit: Not applicable

Flash point: Not applicable

Auto-ignition temperature: Not applicable



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Decomposition temperature: Not available
pH: 8,4 Solution 5%
Kinematic viscosity: Not applicable
Solubility: 355 g/L at 20 °C
Partition coefficient n-octanol/water (Log Kow): Not applicable
Vapour pressure: Not applicable
Density and/or relative density: 1,987 kg/L at 20 °C (water = 1)
Relative vapour density: Not applicable
Particle characteristics: 81.03 µm
9.2 Other information: Not applicable

10. Stability and reactivity

10.1 Reactivity: Stable under recommended conditions of storage and handling.
10.2 Chemical stability: Stable under normal conditions of use. On the other hand, it is hygroscopic it absorbs water from moist air.
10.3 Possibility of hazardous reactions: No dangerous or polymerization reactions will not occur under normal conditions of use.
10.4 Conditions to avoid: Keep away from incompatible products (see section 7).
10.5 Incompatible materials: Halogens.
10.6 Hazardous decomposition products: Potassium oxides. Chlorine.

11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

The following tables summarize the most relevant toxicological data from ECHA, SAX'S (USA), ACGIH (USA), IARC and the CNESST (Canadian) toxicological repertoire.

	Oral	Dermal	Inhalation gases	Inhalation vapours	Inhalation dusts/mists
ATE _{product}	2600 mg/kg	> 5 000 mg/kg	N/A	N/A	> 5 mg/l

No	CAS No :	Common name and synonyms	LD ₅₀ oral mg/kg	LD ₅₀ skin mg/kg	LC ₅₀ inhalation ppmV 4h - gases	LC ₅₀ inhalation mg/l 4h - vapours	LC ₅₀ inhalation mg/l 4h - dusts-mist
1	7447-40-7	Potassium chloride	2600	> 5000	N/A	N/A	> 5.00

Information on likely routes of exposure: This product is absorbed by the digestive tract.

Symptoms related to the physical, chemical and toxicological characteristics: No known symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure: None known effect.



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Aspiration hazard	N/A
Skin corrosion - Skin irritation	N/A
Serious eye damage - Eye irritation - Serious eye irritation	N/A
Skin sensitization	N/A
Respiratory sensitization	N/A
Specific target organ toxicity – single exposure	N/A
Specific target organ toxicity – single exposure Category 3 Narcotic effects	N/A
Specific target organ toxicity – single exposure Category 3 Respiratory tract irritation	N/A
Specific target organ toxicity – repeated exposure	N/A

No	CAS No :	Common name and synonyms	IARC	ACGIH	Mutagenicity	Effect on reproduction
1	7447-40-7	Potassium chloride	Not listed	Not listed	The data do not allow for an adequate assessment of mutagenic effects.	No effects shown.

Cancer classification under IARC (International Agency for Research on Cancer)

- Group 1: carcinogenic to humans.
- Group 2A: probably carcinogenic to humans.
- Group 2B: possibly carcinogenic to humans.
- Group 3: not classifiable as to its carcinogenicity to humans.
- Group 4: probably not carcinogenic to humans.

Cancer classification under ACGIH (American Conference of Governmental Industrial Hygienists)

- Group A1: confirmed human carcinogen.
- Group A2: suspected human carcinogen.
- Group A3: confirmed animal carcinogen with unknown relevance to humans.
- Group A4: not classifiable as a human carcinogen.
- Group A5: not suspected as a human carcinogen.

No data available for mixture. The product has been classified on component hazards. Classes and categories not retained at the end of classification are because the components did not meet the reporting threshold or were not hazardous.

11.2 Information on other hazards

Endocrine disrupting properties

Endocrine disrupting properties: Not applicable

Other information

Not applicable

Endocrine disruptors

No	CAS No :	Common name and synonyms	Health effects
1	7447-40-7	Potassium chloride	No



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12. Ecological information

No	CAS No :	Common name and synonyms	%	12.1 Toxicity	12.2 Persistence and degradability	12.3 Bioaccumulative potential
1	7447-40-7	Potassium chloride	100	No	Yes	No

12.4 Mobility in soil: Not available

12.5 Results of PBT and vPvB assessment: Not available

12.6 Endocrine disrupting properties:

No	CAS No :	Common name and synonyms	Environmental effects
1	7447-40-7	Potassium chloride	No

12.7 Other adverse effects

No	CAS No :	Common name and synonyms	%	Terrestrial Ecotoxicity	Aquatic Ecotoxicity short term	Aquatic Ecotoxicity long term
1	7447-40-7	Potassium chloride	100	No known adverse effect to the environment.	No known adverse effect to aquatic life.	No known adverse effect to aquatic life.

13. Disposal considerations

13.1 Waste treatment methods: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

14. Transport information

	TDG	DOT / TDG	IMDG	IATA
14.1 UN Number				
14.2 UN Proper shipping name	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.3 Transport hazard class(es)				
14.4 Packing group				



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14.5 Environmental hazards: No

14.6 Special precautions for user: Not applicable

14.7 Maritime transport in bulk according to IMO instruments: Not applicable

(according to Annex II of the International Convention for the Prevention of Pollution From Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78), and the International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code))

15. Regulatory information

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

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 59)

This product does not contain any substances are subject to Regulations (EC) No 1005/2009, (EC) No 850/2004 and (EC) No 649/2012.

The customer is responsible for determining the PPE (personal protection equipment) code for this material.

15.2 Chemical safety assessment: Not available

16. Other information

Classification	Category	Hazard Statement	Justification
Not a hazardous substance or mixture		H000 - This product is not a hazardous material.	Calculation

P264	Wash hands thoroughly after handling and any other part of the body that may have been exposed to the product.
P280	Wear protective gloves, protective clothing, eye and face protection.

Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

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