

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended 2015/830.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: Potassium Chloride
Product No. 7731, 0209, 0509, 3045, 6845, 6858, 3040

Additional identification

Chemical name: Potassium chloride
Chemical formula: ClK
INDEX No. -
CAS-No. 7447-40-7
EC No. 231-211-8
REACH Registration No. 01-2119539416-36-XXXX

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

Identified uses: For Laboratory, Research or Manufacturing Use.
Uses advised against: Not determined.

1.3 Details of the supplier of the safety data sheet

Avantor Performance Materials Poland S.A.
Sowinskiego 11str., 44-101 Gliwice,
Poland

Telephone: 48 32 239-20-00
Fax: 48 32 239-23-70

Contact person: Product Information Compliance
E-mail: export@avantormaterials.com

E-mail address of person responsible for this SDS: SDS@avantormaterials.com

1.4 Emergency telephone number: CHEMTREC: (44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has not been classified as hazardous according to the legislation in force.

Classification according to Regulation (EC) No 1272/2008 as amended.

Not classified

2.3 Other hazards No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Potassium chloride	50 - <100%	7447-40-7	231-211-8	01-2119539416-36-XXXX	No data available.	

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First Aid Measures

General: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

4.1 Description of first aid measures

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

Eye contact: If eye irritation persists: Get medical advice/attention. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses.

Ingestion: Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. Get medical attention if symptoms occur. Never give liquid to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed: May cause irritation to skin, eyes and respiratory tract.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: No information about adverse effects due to exposure.

Treatment: Symptoms may be delayed. Treat symptomatically.

SECTION 5: Firefighting Measures

General Fire Hazards: No unusual fire or explosion hazards noted.

5.1 Extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture: None known.

5.3 Advice for firefighters

Special fire fighting procedures: In case of fire and/or explosion do not breathe fumes.

Special protective equipment for firefighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

SECTION 6: Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures:** Keep unauthorised personnel away.
- 6.2 Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.
- 6.3 Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dyke far ahead of larger spill for later recovery and disposal. Sweep up and place in a clearly labeled container for chemical waste.
- 6.4 Reference to other sections:** No data available.

SECTION 7: Handling and Storage:

- 7.1 Precautions for safe handling:** Wash hands thoroughly after handling. Do not taste or swallow. Use personal protective equipment as required. Wear protective gloves/protective clothing/eye protection/face protection. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. See Section 8 of the SDS for Personal Protective Equipment. Do not eat, drink or smoke when using the product. Wash at the end of each work shift and before eating, smoking or using the toilet.
- 7.2 Conditions for safe storage, including any incompatibilities:** No data available.
- 7.3 Specific end use(s):** No data available.

SECTION 8: Exposure Controls/Personal Protection

- 8.1 Control Parameters Occupational Exposure Limits**
None of the components have assigned exposure limits.
- 8.2 Exposure controls Appropriate Engineering Controls:** No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory and eye protection may be needed in special circumstances, such as poorly ventilated spaces, heating, evaporation of liquids from large surfaces, spraying of mists, mechanical generation of dusts, drying of solids, etc.

Eye/face protection: Use personal protective equipment as required.

Skin protection

Hand Protection:	Material: Chemical resistant gloves
Other:	Wear suitable protective clothing.
Respiratory Protection:	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Hygiene measures:	Do not eat, drink or smoke when using the product. Wash hands before breaks and immediately after handling the product.
Environmental Controls:	No data available.

SECTION 9: Physical And Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	solid
Form:	Powder
Colour:	White, Colourless
Odour:	Odorless
Odour Threshold:	No data available.
pH:	7 (15 °C)
Melting Point:	770 - 776 °C
Boiling Point:	1.500 °C
Flash Point:	No data available.
Evaporation Rate:	No data available.
Flammability (solid, gas):	No data available.
Flammability limit - upper (%)	No data available.
Flammability limit - lower (%)	No data available.
Vapour pressure:	No data available.
Vapour density (air=1):	No data available.
Density:	1,99 g/ml (20 °C)
Relative density:	1,99 (20 °C)
Solubility(ies)	
Solubility in Water:	344 g/l (20 °C)
Solubility (other):	ether: Insoluble glycerol: 0,071 g/ml
Partition coefficient (n-octanol/water):	No data available.
Autoignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidising Properties:	No data available.

9.2 Other information

Molecular weight:	74,55 g/mol (CIK)
--------------------------	-------------------

SECTION 10: Stability and Reactivity

10.1 Reactivity:	No dangerous reaction known under conditions of normal use.
-------------------------	---

10.2 Chemical Stability:	Material is stable under normal conditions.
10.3 Possibility of Hazardous Reactions:	Hazardous polymerization does not occur.
10.4 Conditions to Avoid:	No special precautions.
10.5 Incompatible Materials:	None known.
10.6 Hazardous Decomposition Products:	Not determined.

SECTION 11: Toxicological Information

Information on likely routes of exposure

Inhalation:	None known or expected under normal use.
Skin Contact:	None known or expected under normal use.
Eye contact:	None known or expected under normal use.
Ingestion:	None known or expected under normal use.

11.1 Information on toxicological effects

Acute toxicity

Oral

Product: LD 50 (Rat): 2.600 - 3.020 mg/kg

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: None known.

Skin Corrosion/Irritation:

Product: Not known.

Serious Eye Damage/Eye Irritation:

Product: Not known.

Respiratory or Skin Sensitisation:

Product: Not a skin nor a respiratory sensitizer.

Germ Cell Mutagenicity

In vitro

Product: No mutagenic components identified

In vivo

Product: No mutagenic components identified

Carcinogenicity

Product: This substance has no evidence of carcinogenic properties.

Reproductive toxicity

Product: No components toxic to reproduction

Specific Target Organ Toxicity - Single Exposure

Product: None known.

Specific Target Organ Toxicity - Repeated Exposure

Product: None known.

Aspiration Hazard

Product: Not classified

Other Adverse Effects: None known.

SECTION 12: Ecological Information

General information: Not regulated

12.1 Toxicity
Acute toxicity
Fish

Product: No data available.

Specified substance(s)

Potassium chloride
 LC 50 (Bluegill (*Lepomis macrochirus*), 96 h): 950 - 2.010 mg/l
 LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 435 - 485 mg/l
 LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 750 - 1.020 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Potassium chloride
 EC 50 (Water flea (*Daphnia magna*), 48 h): 83 - 170,7 mg/l
 EC 50 (Tubificid worm (*Tubifex tubifex*), 48 h): 1.026 - 1.671 mg/l
 LC 50 (Water flea (*Daphnia magna*), 48 h): 337 - 880 mg/l
 LC 50 (Oligochaete (*Nais variabilis*), 48 h): 67 - 75 mg/l
 EC 50 (Zebra mussel (*Dreissena polymorpha*), 48 h): 147 - 150 mg/l

Chronic toxicity
Fish

Product: No data available.

Specified substance(s)

Potassium chloride
 LOAEL (*Pimephales promelas*, 7 d): 1.000 mg/l
 NOAEL (*Pimephales promelas*, 7 d): 500 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

Potassium chloride
 No data available.

Toxicity to aquatic plants

Product: No data available.

Specified substance(s)
Potassium chloride No data available.

12.2 Persistence and Degradability

Biodegradation

Product: There is no data on the degradability of this product.

Specified substance(s)
Potassium chloride No data available.

BOD/COD Ratio

Product Not determined.

Specified substance(s)
Potassium chloride No data available.

12.3 Bioaccumulative Potential

Product: Not known.

Specified substance(s)
Potassium chloride No data available.

12.4 Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

Potassium chloride No data available.

12.5 Results of PBT and vPvB Not available.

assessment:

Potassium chloride No data available.

12.6 Other Adverse Effects: Harmful to aquatic organisms.

12.7 Additional Information: No data available.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

General information: No data available.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws. Do not allow to enter drains, sewers or watercourses.

SECTION 14: Transport Information

ADR

14.1 UN Number: Not regulated.

14.2 UN Proper Shipping Name: Not regulated.

14.3 Transport Hazard Class(es)

Class: Not regulated.

Label(s): Not regulated.

Hazard No. (ADR): Not regulated.

Tunnel restriction code: Not regulated.

14.4 Packing Group: Not regulated.

14.5 Environmental Hazards: Not regulated.

14.6 Special precautions for user: Not regulated.

RID

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

IMDG

14.1 UN Number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
EmS No.:	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

Not regulated.

IATA

14.1 UN Number:	Not regulated.
14.2 Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
14.5 Environmental Hazards:	Not regulated.
14.6 Special precautions for user:	Not regulated.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

SECTION 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended: none

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use: none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently

given birth or are breast feeding.: none

Directive 2012/18/EU (Seveso III): on the control of major accident hazards involving dangerous substances: none

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

Chemical name	CAS-No.	Concentration
Potassium chloride	7447-40-7	100%

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:
none

Listed on the Candidate List of substances of very high concern (SVHC) Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

Contains:

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

SECTION 16: Other Information

Revision Information: Not relevant.

References

PBT PBT: persistent, bioaccumulative and toxic substance.
vPvB vPvB: very persistent and very bioaccumulative substance.

Key literature references and sources for data: No data available.

Wording of the H-statements in sections 2 and 3

H319 Causes serious eye irritation.

Training information: No data available.

Issue Date: 15.12.2020
SDS No.:

Disclaimer:

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR PERFORMANCE MATERIALS ("AVANTOR") EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN INCLUDING, WITHOUT LIMITATION, AS TO ACCURACY, COMPLETENESS, FITNESS FOR PURPOSE OR USE, MERCHANTABILITY, NON-INFRINGEMENT, PERFORMANCE, SAFETY, SUITABILITY AND STABILITY. This SDS is intended as a guide to the appropriate use, handling, storage and disposal of the product to which it relates by properly trained personnel, and is not intended to be comprehensive. Users of Avantor's products are advised to perform their own tests and to exercise their own judgment to determine the safety, suitability and appropriate use, handling, storage and disposal of each product and product combination for their own purposes and uses. TO THE GREATEST EXTENT PERMITTED BY LAW, AVANTOR DISCLAIMS LIABILITY FOR, AND BY USING AVANTOR'S PRODUCTS THE PURCHASER AGREES THAT UNDER NO CIRCUMSTANCES SHALL AVANTOR BE LIABLE FOR, SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGE OF ANY TYPE OR KIND, INCLUDING WITHOUT LIMITATION, FOR LOSS OF PROFITS, REPUTATIONAL DAMAGE, PRODUCT RECALL OR BUSINESS INTERRUPTION.