



1. Identification of the substance/preparation

Name of product	SOLUMOP®
Manufacturer/distributor	K+S Kali GmbH Bertha-von-Suttner-Str. 7, D-34131 Kassel Postbox 10 20 29, D-34111 Kassel Phone +49 561 9301-0, Fax +49 561 9301-1436
Advice	Abt. ZU Phone +49 561 9301-1604 Fax +49 561 93854-5095
Emergency advice	Abt. ZU Phone +49 561 9301-1604

2. Composition/information on ingredients

CAS-No. 007447-40-7

Potassium Chloride (KCl)

Additional advice

May contain yellow potassium prussiate and sodium carbonate as anti-caking additives in very small quantities.
Designation according to EC Fertilizer-Directive 76/116/EEC and supplementary directives:
Muriate of Potash 60

3. Special hazards information for man and environment

R-phrases

not applicable

Special hazards information for humans and environment

no

4. First aid measures

General information

In the event of persistent symptoms receive medical treatment.

In case of inhalation

Ensure of fresh air.

In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off with water.

In case of eye contact

In case of contact with eyes rinse thoroughly with water.

In case of ingestion

Rinse out mouth thoroughly with water.

5. Fire-fighting measures

Suitable extinguishing material

Product does not burn, fire-extinguishing activities according to surrounding.

Extinguishing material that may not be used for safety reasons

no

Special exposure hazards arising from the substance, combustible products or resulting gases

In case of fire formation of dangerous gases possible.

Hydrogen chloride (HCl)

Special protective equipment for firefighters

Do not inhale explosion and/or combustion gases.

Additional information

Collect contaminated firefighting water separately, must not be discharged into the drains.

6. Accidental release measures

Personal precautions

Avoid dust formation.

Environmental precautions

Do not discharge into the drains or bodies of water..

Methods for cleaning up/taking up

Avoid dust formation.

Disposal according to regulations.

Flush away residues with water.

Take up mechanically and send for disposal.

Additional Information

Informations for safe handling look up chapter 7.

Informations for personal protective equipment look up chapter 8.

Informations for disposal look up chapter 13.

7. Handling and storage

Advice on safe handling

No special measures necessary if used correctly.

Take the usual precautions when handling with chemicals.

Advice on protection against fire and explosion

The product is not combustible.

No special measures necessary.

Requirements for storage rooms and vessels

No special measures required.

Advice on storage compatibility

Keep at a distance of strong acids.

Keep away from water.

Further information on storage conditions

Store in a dry place.

Storage group 13

Information on storage stability

Unlimited stability.

8. Exposure controls / personal protection

Additional advice on system design

no

Respiratory protection

In case of dust formation wear micro dust mask.



Hand protection

Rubber gloves

Eye protection

tightly fitting goggles

Skin protection

no

General protective measures

no

Hygiene measures

Do not eat or drink when working.

Brush soiled clothing.

After work wash thoroughly.

9. Physical and chemical properties

Form

crystalline

Colour

white

Odour

odourless

Data relevant for safety

	Value	Temperature	at	Method	Remark
pH value in delivery state	7	20°C	342 g/l	DIN 38404-5	neutral
boiling point	1411 °C				Ref. (1)
melting point	770 °C				Ref. (1)
Flash point	not applicable				
Flammable solid	no				
Combustion temperature	no				
Autoignition	no				
Vapour pressure	1,5 Torr	700 °C		static	Ref. (1)
Density	1,989 g/cm ³	20 °C	1013 hPa		Ref. (1)
Bulk density	1000-1200 kg/m ³				
Solubility in water	342 g/l	20 °C	1013 hPa		Ref. (1)
Solubility/other	ca. 0,52 Gew-%	25 °C	methanol		Ref. (1)

soluble in alcohols

	Value	Temperature	at	Method	Remark
Partition coefficient (log p_{OW})	not determined				
Combustion value	1				
Oxidizing properties					
no					
Explosive properties					
no					
Additional information					
Physical dates refer to pure product.					

10. Stability and reactivity

Conditions to avoid

Corrosive to metals.

Materials to avoid

HCl, Cl₂

Reactions with strong acids.

Reactions with strong oxidising agents.

Evolution of toxic gases/vapours.

Hazardous decomposition products

No hazardous decomposition products known.

11. Toxicological information

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD 50 acute oral	2600 mg/kg	rat		Ref. (2)
LD 50 acute dermal	not determined			
LC 50 acute inhalation	not determined			
Irritability skin	no			experiences
Irritability eye	no			experiences
Sensitization skin	no			experiences
Sensitization respiratory system	no			experiences

Toxicity test (Additional information)

No experimental indication of genotoxic effects.

Substance has no mutagen activity (Ames test).

Additional information

Toxicological data refer to pure product.

Our data do not cover total texture toxic judgement. Follow the usual hygienic directives for handling with chemicals.

12. Ecological information

Data on elimination (persistence and degradability)

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	Inorganic product, cannot be eliminated from the water by biological purification processes.		not applicable	
Biological degradability	Inorganic product, cannot be eliminated from the water by biological purification processes.		not applicable	
Degradability	Inorganic product, cannot be eliminated from the water by biological purification processes.		not applicable	
Biological eliminability	Inorganic product, cannot be eliminated from the water by biological purification processes.		not applicable	

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 2300 mg/l (48 h)	Golden orfe	DIN 38412 part 31	Ref. (3)
Daphnia	EC50 825 mg/l (48 h)	Daphnia magna	DIN 38412 part 11	Ref. (3)
Algae	EC50 2500 mg/l (72 h)	Scenedesmus subspicatus	DIN 38412 part 33	Ref. (3)
Bacteria	EC20 > 9,6 g/l (5 min)	Photobacterium phosphoreum	DIN 38412 part 8	Ref. (3)

Behaviour in sewage plant

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

Additional ecological information

	Value	Method	Remark
AOX	not applicable		

General regulation

Product is not allowed to discharge into aquatic environment.

! 13. Disposal considerations

Waste code No.

02 01 09
06 03 14

Name of waste

agrochemical waste other than those mentioned in 02 01 08
solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

Recommendations for the product

In accordance with regulations for special waste, must be taken, after pretreatment, to an authorised special waste disposal site.

Recommendations for packaging

Uncontaminated packaging may be taken for recycling.
Totally emptied packaging may be taken for recycling.

14. Transport information**Transport/further informations**

No hazardous material as defined by the prescriptions.

15. Regulatory information**Remarks for classification**

no

R-phrases

not applicable

S-phrases

not applicable

Special labelling for certain preparations

no

National regulations**Restriction of occupation**

no

**Decree for case of
interference/remarks**

not applicable

**Classification according to
VbF/remarks**

VbF: is not subject to decree for compostible liquids.

German TA LUFT remarks

not applicable

Water hazard class

1 KBWS-classification

Other regulations, restrictions and prohibition regulations

no

16. Other information**Recommend uses and restrictions**

no

Further information

The information contained herein is based on our present knowledge and is not meant to guarantee product properties. Recipients of our product must take responsibility for observing existing laws and regulations. Refer to product information paper.
All declarations of safety-data-sheet refer to pure substance.
CAS-No. refers to pure substance.



Safety data-sheet (91/155 EEC)

Printed

07.06.02

Revision

17.05.02 (GB) Version 1.4

SOLUMOP

Sources of key data used

Ref. (1): Gmelins Handbuch der Anorganischen Chemie, System-Nr. 22, Verlag Chemie Berlin, 8. Auflage

Ref. (2): Sbornik Vysledku, Toxilogickeho Vysetreni Latek A Prinpravku, p. 8, 1972

Ref. (3): Data sheet No. 230, Kommision Bewertung wassergefährlicher Stoffe, Bundesgesundheitsamt, P. O. Box 330013, D-14191 Berlin, 1992