

# Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue: 17.02.2004  
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## 1. Identification of the substance/preparation and of the company/undertaking

### *Identification of the product*

Catalogue No.: 104936  
Product name: Potassium chloride GR for analysis

### *Use of the substance/preparation*

Reagent for analysis  
Chemical production

### *Company/undertaking identification*

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49 6151 72-0  
Emergency telephone No.: Please contact the regional Merck representation  
in your country.

## 2. Composition/information on ingredients

CAS-No.: 7447-40-7  
*M*: 74.55 g/mol  
Formula Hill: ClK  
Chemical formula: KCl  
EC-No.: 231-211-8

## 3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

## 4. First aid measures

After inhalation: fresh air.  
After skin contact: Wash off under running water.  
After eye contact: rinse out with water.  
After swallowing (large amounts): consult doctor if feeling unwell.

## 5. Fire-fighting measures

Suitable extinguishing media:  
In adaption to materials stored in the immediate neighbourhood.

Special risks:  
Non-combustible. Ambient fire may liberate hazardous vapours. The following may develop in event of fire: hydrochloric acid.

Special protective equipment for fire fighting:  
Do not stay in dangerous zone without self-contained breathing apparatus.

Other information:  
Prevent fire-fighting water from entering surface water or groundwater.

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## 6. Accidental release measures

Person-related precautionary measures:  
Avoid generation of dusts; do not inhale dusts.

Environmental-protection measures:  
Do not allow to enter sewerage system.

Procedures for cleaning / absorption:  
Take up dry. Forward for disposal. Clean up affected area.

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## 7. Handling and storage

*Handling:*

No further requirements.

*Storage:*

Tightly closed. Dry. Storage temperature: no restrictions.

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## 8. Exposure controls/personal protection

*Personal protective equipment:*

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when dusts are generated.

Eye protection: required

Hand protection: In full contact:  
Glove material: nitrile rubber  
Layer thickness: 0.11 mm  
Breakthrough time: > 480 Min.  
  
In splash contact:  
Glove material: nitrile rubber  
Layer thickness: 0.11 mm  
Breakthrough time: > 480 Min.

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374, for example KCL 740 Dermatril® (full contact), 740 Dermatril® (splash contact). The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Industrial hygiene:  
Wash hands after working with substance.

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## 9. Physical and chemical properties

Form:	solid		
Colour:	white		
Odour:	odourless		
pH value at 50 g/l H <sub>2</sub> O	(25 °C)	5.5-8.0	
Melting point		773	°C
Boiling point	(1013 hPa)	1413	°C
Sublimation point		1500	°C
Ignition temperature		not combustible	
Flash point		not applicable	
Explosion limits	lower	not applicable	
	upper	not applicable	
Vapour pressure		low	
Density	(20 °C)	1.98	g/cm <sup>3</sup>
Bulk density		~ 1000	kg/m <sup>3</sup>
Solubility in water	(20 °C)	347	g/l

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## 10. Stability and reactivity

### *Conditions to be avoided*

no information available

### *Substances to be avoided*

no information available

### *Hazardous decomposition products*

in the event of fire: See chapter 5.

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## 11. Toxicological information

### *Acute toxicity*

LD<sub>50</sub> (oral, rat): 2600 mg/kg.

### Specific symptoms in animal studies:

Eye irritation test (rabbit): Slight irritations.

### *Subacute to chronic toxicity*

Mutagenicity (mammal cell test): chromosome aberration positive. (in vitro)

Bacterial mutagenicity: Ames test: negative.

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## *Further toxicological information*

After eye contact: Slight irritations.  
After swallowing of large amounts: Nausea, vomiting, cardiac dysrhythmia, cardiovascular failure.

## *Further data*

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

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## **12. Ecological information**

Biologic degradation:  
Methods for the determination of biodegradability are not applicable to inorganic substances.

Ecotoxic effects:  
Biological effects:  
Fish toxicity: *Gambusia affinis* LC<sub>50</sub>: 920 mg/l /96 h.  
Daphnia toxicity: *Daphnia magna* EC<sub>50</sub>: 825 mg/l /48 h.  
Algal toxicity: *Desmodesmus subspicatus* IC<sub>50</sub>: 2500 mg/l /72 h.

Further ecologic data:  
No ecological problems are to be expected when the product is handled and used with due care and attention.

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## **13. Disposal considerations**

### *Product:*

Chemicals must be disposed of in compliance with the respective national regulations. Under [www.retrologistik.de](http://www.retrologistik.de) you will find country- and substance-specific information as well as contact partners.

### *Packaging:*

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under [www.retrologistik.de](http://www.retrologistik.de) you will find special information on the respective national conditions as well as contact partners.

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## **14. Transport information**

Not subject to transport regulations.

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## **15. Regulatory information**

### *Labelling according to EC Directives*

Symbol: ---  
R-phrases: ---  
S-phrases: ---

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## **16. Other information**

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## *Reason for alteration*

General update.

## *Regional representation:*

This information is given on the authorised Safety Data Sheet for your country.

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*The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.*