

Date of issue: 20.03.2009

Version: 0005

n.ap. = not applicable

n.av. = not available

SI Analytics

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

1.1 Identification of the substance or preparation

Trade name **Wässerungslösung**Product number **scho0057**Substance code **L 911, L 911 4**

1.2 Use of the substance/preparation

The product is used as a laboratory chemical.

1.3 Company/undertaking identification

Address: SI Analytics GmbH

Geb. G12

Hattenbergstrasse 10

D-55122 Mainz

Information: Telephone: int+49-(0)6131-66-5051 or -5116

Fax: int+49-(0)6131-66-5001

e-mail-address of the competent person responsible for this Safety Data Sheet:

urban-finking.gefstoff@t-online.de

1.4 Emergency telephone

Beratungsstelle für Vergiftungserscheinungen und Embryonaltoxikologie, Berlin

Telephone: int+49-(0)30 - 19240

2. Hazards identification

2.1 Hazards identification

The product is not dangerous within the meaning of the current version of Directive 1999/45/EC.

2.2 Critical hazards to man

No special hazards have to be mentioned.

2.3 Critical hazards to the environment

The product is classified as low hazardous to water.

3. Composition/information on ingredients

This product is a preparation. It is an aqueous solution of potassium chloride, glycerol and special components.

3.1 Substances presenting a health / environmental hazard within the meaning of Directive 67/548/EEC

CAS number	EC number	Identification	m %	Symbols	R phrases
n.ap.	n.ap.	n.ap.	n.ap.	n.ap.	n.ap.

For further details see heading 15.

3.2 Substances for which there are Community workplace exposure limits, which are not already included under heading 3.1 (see also heading 8.)

No substances.

3.3 Additional information

The product contains < 10% glycerol. A national occupational exposure limit value for U.K. has been specified.

Potassium chloride: national occupational exposure limit values for EU member states are existing.

4. First aid measures

4.1 General information

Change soaked clothing.

4.2 after inhalation

Ensure supply of fresh air.

4.3 after contact with skin

In case of contact with skin wash off with water.

4.4 after contact with eyes

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

4.5 after ingestion

In the event of symptoms call physician.

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4.6 Hints for the physician

Symptoms After swallowing of large amounts: nausea, vomiting.
Hazards n.av.
Treatment Treat symptomatically.

4.7 First aid equipment

Emergency eyewash should be provided in the immediate working surroundings.

4.8 Additional remarks

None.

5. Fire-fighting measures**5.1 Suitable extinguishing media**

Water spray jet, dry powder, foam.
Co-ordinate fire-fighting measures to the fire surroundings.

5.2 Extinguishing media which must not be used for safety reasons

Full water jet.
Co-ordinate fire-fighting measures to the fire surroundings.

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In the event of fire the following can be released: carbon monoxide, carbon dioxide, acrolein, hydrogen chloride.

5.4 Special protective equipment for fire-fighters

Use self-contained breathing apparatus.

5.5 Further information

Do not inhale explosion and/or combustion gases. Cool endangered containers with water spray jet.
Contaminated firefighting water must be disposed of in accordance with the local regulations.

6. Accidental release measures**6.1 Personal precautions** (see also heading 8., Personal protective equipment)

No special measures necessary if used correctly.

6.2 Environmental precautions (see also heading 13., Disposal considerations)

Do not discharge large amounts into the drains/surface waters/groundwater.

6.3 Methods for cleaning up

Flush away small amounts with water.
Pick up large amounts with suitable absorbent material and dispose of in accordance with the regulations.

6.4 Additional information

None.

7. Handling and storage (National measures see headings 15. and 16.)**7.1 Handling****7.1.1 Advice on safe handling**

No special measures necessary if used correctly.

7.1.2 Advice on protection against fire and explosion

None.

7.2 Storage**7.2.1 Requirements for storage rooms and vessels**

Keep container tightly closed.

7.2.2 Advice on storage compatibility

Do not store together with strong oxidising agents.

7.2.3 Further information on storage conditions

Recommended storage temperature: 15 - 25 °C.

7.2.4 Storage class (for Germany only)

LGK 12 (Non-flammable liquids) in accordance with the VCI Guideline for the mixed storage of chemicals.

7.3 Specific use(s)

No information about specific uses available.

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8. Exposure controls/Personal protection**8.1 Exposure limit values**

CAS number	Identification	Limit value	Remarks
56-81-5	glycerol, mist	10 mg/m ³	national limit value – eight hours for U.K.
7447-40-7	potassium chloride	5 mg/m ³	national limit value – eight hours for Latvia and Lithuania

8.2 Exposure controls

See also heading 7.1.

Additional advice on system design

No additional advice.

8.2.1 Occupational exposure controls**Personal protective equipment****Respiratory protection** n.ap.**Hand protection** Protective gloves are recommended in case of frequent or prolonged contact with skin.

Suitable: natural rubber (0.5 mm; breakthrough time ≥ 8 h);
 neoprene (0.5 mm; breakthrough time ≥ 8 h);
 nitrile rubber (0.35 mm; breakthrough time ≥ 8 h);
 butyl rubber (0.5 mm; breakthrough time ≥ 8 h);
 fluorinated rubber (0.4 mm; breakthrough time ≥ 8 h);
 PVC (0.5 mm; breakthrough time ≥ 8 h).

Eye protection Safety glasses.**Body protection** n.ap.**General protective measures and hygiene measures**

Avoid contact with eyes and skin. At work do not eat, drink, smoke.

Wash hands before breaks and after work. Use barrier skin cream.

Emergency eyewash should be provided in the immediate working surroundings.

8.2.2 Environmental exposure controls

See heading 6.

9. Physical and chemical properties**9.1 General information****Physical state:** liquid **Colour:** colourless **Odour:** odourless**9.2 Important health, safety and environmental information**

pH (as supplied): 4.5 (of an aqueous solution): n.av.
 Boiling point / boiling range (°C): +108
 Freezing point (°C): - 11
 Thermal decomposition (°C): n.av.
 Flash point (°C), c.c.: n.ap.
 Ignition temperature (°C): n.ap.
 Lower explosion limit: n.ap. Upper explosion limit: n.ap.
 Vapour pressure: n.av.
 Relative density / bulk density: n.av.
 Solubility in water: soluble
 Viscosity (25°C): 1.3 mm²/s

9.3 Other information

None

10. Stability and reactivity**10.1 Conditions to avoid**

If product is heated liberation of acrolein is possible.

10.2 Materials to avoid

Reactions with oxidising agents possible

10.3 Hazardous decomposition products

Hazardous decomposition products: carbon monoxide, carbon dioxide, acrolein, hydrogen chloride.

10.4 Additional information

None.

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11. Toxicological information**11.1 Toxicokinetics, metabolism and distribution**

No data are available for the product.

11.2 Acute effects (acute toxicity, irritation and corrosivity)

LD50 rat, oral	(mg/kg)	2600	(potassium chloride)	(RTECS)
		12600	(glycerol)	(RTECS)
LD50 rabbit, dermal	(mg/kg)	> 10000	(glycerol)	(RTECS)
LC50 rat, inhalation	(mg/l/4h)	n.av.		
Irritant effect on skin		n.av.		
Irritant effect on eyes		n.av.		

11.3 Sensitisation

No data are available for the product.

11.4 Repeated dose (sub-acute, sub-chronic, chronic)

No data are available for the product.

11.5 CMR effects (carcinogenicity, mutagenicity, toxicity for the reproduction)

Carcinogenicity	n.av.
Mutagenicity	n.av.
Toxicity for the reproduction	n.av.

11.6 Comprehensive evaluation of the CMR properties of substances subject to registration

No data available.

11.7 Experiences made in practice

After swallowing of large amounts: nausea, vomiting.

11.8 General remarks

The product has not been tested.

12. Ecological information**12.1 Ecotoxicity****Aquatic toxicity**

LC50	(fish)	920 mg/l/96 h (Gambusia affinis; Western Mosquitofish)	(potassium chloride)	(IUCLID)
		> 5000 mg/l/24 h (Carassius auratus; goldfish)	(glycerol)	(IUCLID)
EC50	(daphnia)	825 mg/l/48 h (Daphnia magna) (potassium chloride)		(IUCLID)
		> 10000 mg/l/24 h (Daphnia magna) (glycerol)		(IUCLID)
IC50	(algae)	2500 mg/l/72 h (Desmodesmus subspicatus)	(potassium chloride)	(IUCLID)

Behaviour in sewage works:

The behaviour of the product in sewage treatment plants has not been tested.

12.2 Mobility

The product has not been tested.

12.3 Persistence and degradability

The product has not been tested.

12.4 Bioaccumulative potential

The product has not been tested.

12.5 Results of PBT assessment

No data available.

12.6 Other adverse effects

Ozone depletion potential	n.av.
Photochemical ozone creation potential	n.av.
Global warming potential	n.av.
AOX-hint	Not to apply.

12.7 Further information

Chemical oxygen demand (COD)	n.av.
Biochemical oxygen demand (BOD)	n.av.

The product is classified as low hazardous to water.

Contains according to the formulation following compounds of directives 2006/11/EC and 80/68/EEC:

None.

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13. Disposal considerations**13.1 Product / unused product**

Waste disposal corresponding to European Waste Catalogue.
 Wastes must be classified with respect to their origin and depending on different processing steps. The waste codes mentioned as follows are only constituted as our recommendations. Referring to the particular case they should be completed or revised.

Waste type: Wastes from inorganic chemical processes
 Waste notation: Wastes from the MFSU of salts and their solutions and metallic oxides
 EC waste code: 06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
 Disposal operations: D 9 Physico-chemical treatment
 Recovery operations: R 2 Solvent reclamation/regeneration
 R 4 Recycling/reclamation of metals and metal compounds

13.2 Contaminated packaging**Recommendation**

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Recommended cleansing agent

Packaging that cannot be cleaned should be disposed off as product waste.
 Water

14. Transport information**14.1 Land transport ADR / RID**

No dangerous good in accordance with the regulations.

14.2 Marine transport / IMDG-Code

No dangerous good in accordance with the regulations.

14.3 Air transport ICAO / IATA-DGR

No dangerous good in accordance with the regulation.

15. Regulatory information**15.1 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for a substance in the product.

15.2 Labelling in accordance with Directive EC

Symbol(s) of danger: n.ap.

Indication(s) of danger: n.ap.

Hazardous component(s) to be indicated on label: n.ap.

R phrases: n.ap.

S phrases: n.ap.

Special labelling for certain preparations: n.ap.

Remarks: The normal safety precautions for handling of chemicals must be observed.

15.3 Further Community legislation

None.

15.4 National measures (for Germany only)

Indications on restriction of occupation: n.ap.

Major-accident Regulation: n.ap.

Fire and explosion hazards: n.ap.

Regulation on clean air (TA Luft): n.ap.

Water hazard class: 1 (calculation according to KBwS)
 The Federal State Enactment for Facilities to Handle Water Endangering Substances (German VAWS-Anlagenverordnung) has to be observed.

German Ordinance on Hazardous Substances
 (in accordance with Directive 98/24/EC):

Article 7 must be observed

Articles 8, 9, 14 and 15 must be observed as required

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16. Other information

16.1 Keeping (restrictions) n.ap.
Distribution for industry consumer, for the general public

16.2 Full text of the R phrases referred to under heading 3 of the Safety Data Sheet
Not to apply.

16.3 Technical contact point

SI Analytics GmbH, Herr Dr. M. Lange
SI Analytics GmbH, Herr H. Becker

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Version 0005: replacement of version 0004 dated 31.01.2009

Revised headings: page headers, 1.3, 16.3 (change of company identification)

16.4 The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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