

Date of issue: 20.03.2009

n.ap. = not applicable

n.av. = not available

Version: 0020

SI Analytics

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

1.1 Identification of the substance or preparation

Trade name **Puffer pH 1.68**
 Product number **scho0020**
 Substance code **L 168, L 1684, L 4791, L 4797**

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

Irritating effects on the skin and eyes cannot be ruled out.

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 tetraoxalate.

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
127-96-8	204-874-6	potassium tetraoxalate	< 5	Xn	21/22

For further details see heading 15.

Full text of the R phrases see heading 16.2.

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

None.

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 immediately with plenty of water.

In the event of symptoms take medical treatment.

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**

n.av.

Hazards

Irritating effects on the skin and eyes cannot be ruled out.

Treatment

Treat symptomatically.

4.7 First aid equipment

Emergency eyewash should be provided in the immediate working surroundings.

4.8 Additional remarksNone.

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

Product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

5.2 Extinguishing media which must not be used for safety reasons

Product itself does not burn. 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.

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 (firefighting water reacts acidic).

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

Avoid contact with eyes and skin. Use personal protection.

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

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

6.3 Methods for cleaning up

Pick up with absorbent material and dispose of in accordance with the regulations.

6.4 Additional informationNone.

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

Open and handle container with care. Use acid-resistant equipment.

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 alkalies.

7.2.3 Further information on storage conditions

Provide acid-resistant floor.

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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Product number: **scho0020****8. Exposure controls/Personal protection****8.1 Exposure limit values**

CAS number	Identification	Limit value	Remarks
n.ap.	n.ap.	n.a.p.	n.ap.

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 (acid-resistant).

Suitable: nitrile rubber (0.11 mm; breakthrough time ≥ 8 h) (in full contact)nitrile rubber (0.40 mm; breakthrough time ≥ 8 h) (in splash contact)**Eye protection**

Tightly fitting safety glasses.

Body protection

Protective clothing.

General protective measures and hygiene measures

Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately.

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):

1.68 $\pm$ 0.1

(of an aqueous solution):

n.av.

Boiling point / boiling range (°C):

n.av.

Melting point (°C):

n.av.

Thermal decomposition:

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 (25°C):

n.av.

Relative density / bulk density:

n.av.

Solubility in water:

soluble

Viscosity (25°C):

n.av.

9.3 Other information

None

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

No particular conditions known.

10.2 Materials to avoid

Exothermic reaction with alkalis.

10.3 Hazardous decomposition products

Hazardous decomposition products: carbon monoxide, carbon dioxide.

10.4 Additional information

None.

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)

n.av.

LD50 rabbit, dermal

(mg/kg)

n.av.

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.

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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

Irritating effects on the skin and eyes cannot be ruled out.

11.8 General remarks

The product has not been tested.

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

LC50	(fish)	n.av.
EC50	(daphnia)	n.av.
IC50	(algae)	n.av.

Behaviour in sewage works:

The product is an acid.

The product needs to apply neutralising agents before draining to wastewater treatment plants.

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

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 3 Recycling/reclamation of organic substances which are not used as solvents

13.2 Contaminated packaging**Recommendation**

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

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

Recommended cleansing agent

Water

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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:

Preparations not intended for the general public (the label on the packaging must bear the following inscription):
"Safety data sheet available for professional user on request."

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

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

R21/22: Harmful in contact with skin and if swallowed.

16.3 Technical contact point

SI Analytics GmbH, Herr Dr. M. Lange

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

SI Analytics GmbH, Herr H. Becker

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

Version 0020: replacement of version 0019 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.

Compiled by:	Dr. Michael Urban
	Fachberatung Gefahrstoff Gefahrgut
	Vogelbeerweg 3 D-26180 Rastede-Ipwege
	Tel.: int+49-(0)4402-695620 Fax: int+49-(0)4402-695621