

Safety data sheet



MSDS_50_rh_2024-2-EN

Safety data sheet
according to Regulation (EC) No
1907/2006
Version 7.1 Revised 14.10.2024
Print date 16.10.2024

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

1.1 Product identifier

Product name / designation	Humidity standard 50 %rh
Product number	EA50-SCS
Brand	ROTRONIC
UFI code	RSUE-10XS-400V-GR6U

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

Areas of use [SU]	SU9 Production of fine chemicals
Product categories [PC]	PC21 Laboratory chemicals
Application of the substance / mixture	Only suitable for calibrating of humidity meters For professional users only

1.3 Details of the supplier of the safety data sheet

Company	ROTRONIC AG Grindelstrasse 6 CH-8303 Bassersdorf	Process Sensing Technologies PST GmbH Max-Planck-Str. 14 D-61381 Friedrichsdorf
Telephone	+41 44 838 11 11	+49 7243 6019000
Email address	measure@rotronic.ch	de.rotronic.sales@processsensing.com
Website	www.ProcessSensing.com	
Providing information	+41 44 838 11 11 (This number is only manned during office hours)	
e-mail (competent person)	pm@rotronic.ch	

1.4 Emergency number

Switzerland / Germany	Tox Info Suisse (CH) +41 44 251 51 51 (145)	Poison Center D-Munich (DE) +49 89 192 40
United Kingdom / Ireland	Poisons Information Centre, London (UK) +44 845 46 47 (111)	National Poisons Information Centre (NPIC), Dublin (IE) +353 1 809 2166
United States	New York City Poison Control Center 1-800-222-1222	

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Section 2: Possible dangers

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute toxicity, Category 4, Ingestion; H302 Calculation method
Irritant effect on skin, Category 2; H315 Calculation method
Eye irritation, Category 2; H319 Calculation method

Hazard warnings for health hazards

H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.

Hazard warnings for environmental hazards


Not hazardous to water (nwg)

Remark

The classification corresponds to the current EC lists, but is supplemented by information from specialised literature and company data.

2.2 Labelling elements

Classification according to Regulation (EC) No 1272/2008 [CLP]

Pictogram	 GHS07	
Signal word	Warning	
Hazard warnings	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
Safety instructions	P264	Wash skin thoroughly after use.
	P280	Wear protective gloves/eye protection
	P301	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
	P312	
	P302	IF ON SKIN: Wash with plenty of water.
	P352	
	P305 P351 P338	ON CONTACT WITH THE EYES: Rinse gently with water for a few minutes. Remove any contact lenses if possible. Continue rinsing.
	P501	Dispose of contents/container to a recognized waste disposal facility.

2.3 Other dangers

No data available

Section 3: Composition/information on ingredients

3.1 Fabrics

Not applicable

3.2 Mixtures

Hazardous ingredients

CAS No.	EC no.	REACH	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
7447-41-8	231-212-3	#1	Lithium chloride	24 - 30 % by weight	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2 ; H319	ATE(Oral): 526 mg/kg

#1

A registration number for this substance is not available because the substance or its use is exempted from registration, the annual tonnage does not require registration or registration is foreseen for a later date.

Section 4: First aid measures

4.1 Description of first aid measures

General information

Remove soiled, soaked clothing immediately.

After inhalation

Provide fresh air.

Seek medical treatment in case of complaints.

If there is a risk of unconsciousness, position and transport in the recovery position.

After skin contact

In case of contact with skin, wash off immediately with plenty of soap and water.

After eye contact

In case of eye contact, rinse the eyes with water for a sufficient period of time with the eyelids open, then consult an ophthalmologist immediately.

After ingestion

DO NOT induce vomiting.

If swallowed, seek medical advice immediately and show this container or label. Rinse mouth thoroughly with water.

Drink plenty of water in small sips (dilution effect).

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Information on immediate medical assistance or specialised treatment

No data available.

Section 5: Firefighting measures**5.1 Extinguishing agent****Suitable extinguishing agents**

Alcohol-resistant foam

Product itself does not burn; adapt extinguishing measures to surrounding fire.

Extinguishing powder

Carbon dioxide (CO₂)

Water spray jet

Unsuitable extinguishing agents

Full water jet

5.2 Special hazards arising from the substance or mixture**Hazardous combustion products**

Formation of hazardous gases possible in case of fire.

Can be released in case of fire:

Carbon monoxide Carbon dioxide (CO₂)

5.3 Instructions for firefighting**Special protective equipment for firefighting**

In case of fire: Wear self-contained breathing apparatus.

Additional information

The product itself does not burn.

Adapt extinguishing measures to the surroundings.

Use a water spray jet to protect persons and to cool containers in the danger zone.

Section 6: Measures in the event of accidental release**6.1 Personal precautions, protective equipment and emergency procedures****Staff not trained for emergencies**

Avoid contact with eyes and skin.

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental protection measures

Do not allow to enter drains or waterways.

In the event of spillage into watercourses or sewers, inform the responsible authorities.

6.3 Methods and material for retention and cleaning**For retention**

Ensure adequate ventilation.

Absorb residues with liquid-binding material (e.g. acid binder). Dispose of in suitable containers for recovery or disposal.

6.4 Reference to other sections

Safe handling: see section 7

Personal protective equipment: see section 8

Disposal: see section 13

Section 7: Handling and storage

7.1 Protective measures for safe handling

Protective measures

Avoid contact with eyes and skin.

The usual precautionary measures for handling chemicals must be observed.

The product is not: Flammable

Keep the packaging dry and well sealed to avoid contamination and absorption of moisture.

Store container in a cool, well-ventilated place.

Avoidance of: Eye contact Skin contact

Notes on general industrial hygiene

Do not eat, drink, smoke or snuff at the workplace.

Keep away from food and drink.

Wash hands before breaks and at the end of work.

7.2 Conditions for safe storage, taking into account incompatibilities

Requirements for storage rooms and containers

Keep/store only in the original container.

Keep container tightly closed. Suitable material for containers/systems:

Material, acid-resistant

Provide a retention tank, e.g. floor pan without drain.

Storage class

8B Non-flammable corrosive hazardous substances

Substances to avoid

Do not store together with:

Food and animal feed

Further information on storage conditions

Keep container tightly closed and store in a cool, well-ventilated place. Protect from heat and direct sunlight.

7.3 Specific end uses

No data available

Section 8: Exposure controls/personal protective equipment

8.1 Parameters to be monitored

No data available

8.2 Exposure controls and monitoring

Suitable technical control equipment

Technical measures to prevent exposure

Avoid contact with eyes and skin.

Ensure good room ventilation and, if necessary, extraction at the workplace.

Personal protective equipment

Eye/face protection

Safety goggles EN 166

Hand protection

Information on glove material [type, thickness, penetration time/wear time, wetting strength]: Nitrile rubber, butyl rubber; 0.5 mm; approx. 480 min.

Permeation level: 6

Penetration level according to EN374:3

Observe the glove manufacturer's instructions on permeability and breakthrough times and the special conditions at the workplace.

Body protection

Normal work clothes

Respiratory protection

No respiratory protection required

Additional notes

No occupational exposure limits (OEL) have been defined for the product.

Section 9: Physical and chemical properties

9.1 Information on the basic physical and chemical properties

a) Aggregate state	Liquid
b) Colour	Clear, colourless
c) Odour	Characteristic
d) Melting point/freezing point	Not determined
e) Boiling point	Not determined
f) Flammability	Not determined
g) Lower and upper explosion limit	Not determined
h) Flash point	Not determined
i) Ignition temperature	Not determined
j) Decomposition temperature	Not determined
k) pH value	4
l) Kinematic viscosity	Not determined
m) Solubility	Completely soluble
n) Partition coefficient: n-octanol/water	Not determined
o) Vapour pressure	Not determined

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p) Density	Not determined
q) Relative vapour density	Not determined
r) Particle properties	Not determined

9.2 Other information Other safety-related parameters

Explosive properties: The product is not explosive.

Section 10: Stability and reactivity

10.1 Reactivity

Reactions with strong oxidising agents.
Reactions with alkalis (lyes).

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Accidental opening of the ampoules or glass breakage.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No known hazardous decomposition products.
No decomposition when used as intended.

Section 11: Toxicological information

11.1 Information on hazard classes according to Regulation (EC) No 1272/2008

Acute toxicity

Animal data

	Active dose	Method, evaluation	Source, remark
Acute oral toxicity	CAS-Nr.7447-41-8 Lithiumchlorid LD50: 526 mg/kg		
Acute dermal toxicity	not determined		
Acute inhalation toxicity	not determined		

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Corrosive/irritant effect on the skin

Animal data

Result / Evaluation	Method	Source, remark
No data available		

Assessment/classification

Causes irritation.

Serious eye damage/irritation

Assessment/classification

Causes severe irritation.

Sensitisation of the respiratory tract

Not determined

Sensitisation of the skin

Animal data

Result / Evaluation	Dose / concentration	Method	Source, remark
No data available			

Germ cell mutagenicity

Not determined

Carcinogenicity

Not determined

Reproductive toxicity

Not determined

Specific target organ toxicity - single exposure

Not determined

Specific target organ toxicity - repeated exposure

Not determined

Aspiration hazard

Not determined

11.2 Information on other hazards

Other information

Toxicological data are not available.

The product has not been tested.

The statement is derived from the properties of the individual components.

Section 12: Environmental information**12.1 Toxicity****Aquatic toxicity**

	Active dose	Method, evaluation	Source, remark
Acute (short-term) fish toxicity	not determined		
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustaceans	not determined		
Chronic (long-term) toxicity to aquatic invertebrates	not determined		
Acute (short-term) toxicity to algae and cyanobacteria	not determined		
Chronic (long-term) toxicity to algae and cyanobacteria	not determined		
Toxicity to other aquatic plants/organisms	not determined		
Toxicity for microorganisms	not determined		

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential**Estimation / categorisation**

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of the PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available.

12.7 Other harmful effects**Additional ecotoxicological information****Additional information**

Ecological data are not available.

Do not allow uncontrolled release of the product into the environment.

The product must not get into ground water or surface water.

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Section 13: Notes on disposal

13.1 Waste treatment processes

Waste codes/waste designations according to EAK/AVV

Waste code ProductWaste designation

160303 *inorganic	wastes containing hazardous substances
160507 *Used	inorganic chemicals consisting of or containing hazardous substances

Proper disposal / product

Product residues must be disposed of in accordance with the Ordinance on the Avoidance and disposal of waste (Ordinance on the Disposal of Waste, VVEA, SR 814.600), the Ordinance on the Movement of Waste (VeVA, SR 814.610) and the Ordinance of the TOB on Lists on the transport of waste (LVA, SR 814.610.1).

Leave chemicals in original containers. Do not mix with other waste.

Uncleaned containers must be treated in accordance with the product.

Proper disposal / packaging

Completely emptied packaging can be recycled.

Non-contaminated and completely emptied packaging can be recycled. Contaminated packaging must be treated in the same way as the substance.

Section 14: Transport details

14.1 UN number or ID number

Land transport (ADR/RID)	-
Sea transport (IMDG)	-
Air transport (ICAO-TI / IATA-DGR)	-

14.2 UN proper shipping name

Land transport (ADR/RID)	No dangerous goods
Sea transport (IMDG)	Not dangerous goods
Air transport (ICAO-TI / IATA-DGR)	Not dangerous goods

14.3 Transport hazard classes

Land transport (ADR/RID)	-
Sea transport (IMDG)	-
Air transport (ICAO-TI / IATA-DGR)	-

14.4 Packaging group

Land transport (ADR/RID)	-
Sea transport (IMDG)	-
Air transport (ICAO-TI / IATA-DGR)	-

14.5 Environmental hazards

Land transport (ADR/RID)	no
Sea transport (IMDG)	Marine pollutant: no

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Air transport (ICAO-TI / IATA-DGR)

no

14.6 Special precautions for the user

No data available

14.7 Transport of bulk goods by sea in accordance with IMO instruments

No data available

Land transport (ADR/RID)

UN number or ID number	-
Proper UN shipping name	-
Transport hazard classes	-
Hazard label	-
Classification code	-
Packaging group	-
Environmental hazards	no
Limited quantity (LQ)	-
Special regulations	-
Tunnel restriction code	-

Sea transport (IMDG)

UN number or ID number	-
Proper UN shipping name	-
Transport hazard classes	-
Packaging group	-
Environmental hazards	-
Limited quantity (LQ)	-
Marine pollutant	no
EmS	-

Air transport (ICAO-TI / IATA-DGR)

UN number or ID number	-
Proper UN shipping name	-
Transport hazard classes	-
Packaging group	-
Environmental hazards	-

Section 15: Legislation

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

This safety data sheet fulfils the requirements of Regulation (EC) No. 1907/2006.

Restrictions on use

None for professional users.

15.2 Chemical safety assessment

National regulations

Chemical safety assessments for substances in this mixture have not been carried out.

Section 16: Other information

Abbreviations and acronyms

Acute toxicity, Category 4, Ingestion; H302
Irritant effect on the skin, Category 2; H315
Eye irritation, Category 2; H319

Additional notes

Existing national and local laws regarding chemicals must be observed.
The information in this safety data sheet is correct to the best of our knowledge, information and belief at the date of printing. The information is intended to provide you with guidelines for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal. The information is not transferable to other products. If the product is mixed, blended or processed with other materials or subjected to processing, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless expressly stated otherwise.

Wording of H and EUH phrases (number and full text)

H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.

Further information

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