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 P312	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
	P302 P352	IF ON SKIN: Wash with plenty of water.
	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

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		

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.

Section 13: Notes on disposal

13.1 Waste treatment processes

Waste codes/waste designations according to EAK/AVV

Waste code	Product	Waste 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 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

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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