

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 4/15/2019 Version: 1.0

1.1. Product identifier	nce/mixture and of the company/undertaking	
Product form	: Substance	
Substance name	: Ceftizoxime sodium salt	
IUPAC name	: Sodium (6R,7R)-7-{[(2Z)-2-(2-amino-1,3-thiazol-4-yl)-2-methoxyiminoacetyl]amino]-8-oxo- 5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid	
EC-No.	: 629-729-8	
CAS-No.	: 68401-82-1	
Product code	: 41432628	
Formula	: C13H12N5NaO5S2	
Product group	: Raw material	
1.2. Relevant identified uses of the substance		
1.2.1. Relevant identified uses		
Main use category	: Laboratory use,Industrial use,Professional use	
Industrial/Professional use spec	: For professional use only	
 1.2.2. Uses advised against No additional information available 1.3. Details of the supplier of the safety data Supplier Scafell Organics 	sheet	
Molekula Ltd Lingfield Way Darlington - England T +44 (0) 1949 823777 / +44 (0) 7590 545705 info@molekula.com / kbowen@molekula.com - www.	. <u>molekula.com</u>	
1.4. Emergency telephone number Emergency number : +	44 (0) 7590 545705	
SECTION 2: Hazards identification		
2.1. Classification of the substance or mixtu	re	
Classification according to Regulation (EC) No. 12	272/2008 [CLP]	
Skin corrosion/irritation, Category 2	H315	
Serious eye damage/eye irritation, Category 2		
Specific target organ toxicity — Single exposure, Category 3, H335		
Specific target organ toxicity — Single exposure, Cate	H319 egory 3, H335	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16	egory 3, H335	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and envi No additional information available	egory 3, H335	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and envi No additional information available 2.2. Label elements	egory 3, H335 ironmental effects	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and envi No additional information available	egory 3, H335 ironmental effects	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and envi No additional information available 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2	egory 3, H335 ironmental effects	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and envi No additional information available 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2	egory 3, H335 ironmental effects 2008 [CLP] GHS07	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and envi No additional information available 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2 Hazard pictograms (CLP)	egory 3, H335 ironmental effects	
Specific target organ toxicity — Single exposure, Cate Respiratory tract irritation Full text of H statements : see section 16 Adverse physicochemical, human health and envi No additional information available 2.2. Label elements Labelling according to Regulation (EC) No. 1272/2 Hazard pictograms (CLP) Signal word (CLP)	egory 3, H335 ironmental effects 2008 [CLP] GHS07 : Warning : H315 - Causes skin irritation. H319 - Causes serious eye irritation.	

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients		
3.1. Substances		
Product identifier	%	
(CAS-No.) 68401-82-1 (EC-No.) 629-729-8	100	
	Product identifier (CAS-No.) 68401-82-1	

Full text of H-statements: see section 16 3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: If possible show this sheet, if not available show packaging or label. Never give anything by mouth to an unconscious person. Do not leave affected person unattended.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. If breathing difficulties persist : Get medical advice/attention.
First-aid measures after skin contact	: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. If irritation persists, consult a doctor.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention.
4.2. Most important symptoms and effects	s, both acute and delayed
Symptoms/effects after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing). Headache.
Symptoms/effects after skin contact	: May cause moderate irritation, including burning sensation, tearing, redness or swelling. Itching.
Symptoms/effects after eye contact	: Causes serious eye irritation. redness, itching, tears. stinging.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. Abdominal pain, nausea.
4.3. Indication of any immediate medical a	attention and special treatment needed
Get immediate medical advice/attention.	

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the substa	
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO2). Nitrogen oxides. Sodium Oxides. Sulphur oxides.
5.3. Advice for firefighters	
Precautionary measures fire	: Keep container tightly closed and away from heat, sparks and flame. Keep away from combustible materials.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: Warn all persons of toxic hazard.

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment and emergency procedures			
General measures	: Isolate from fire, if possible, without unnecessary risk. Avoid dust formation. No flames, no sparks. Eliminate all sources of ignition.		
6.1.1. For non-emergency personnel			
Protective equipment	: Wear recommended personal protective equipment.		
Emergency procedures	: Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Do not touch or walk on the spilled product. Avoid contact with skin, eyes and clothing.		
Measures in case of dust release	: Keep upwind. Avoid creating or spreading dust. Ventilate the area thoroughly, especially low lying areas (basements, workpits etc).		
6.1.2. For emergency responders			
Protective equipment	: Equip cleanup crew with proper protection. Use self-contained breathing apparatus and chemically protective clothing.		
Emergency procedures	: Ventilate area.		
6.2. Environmental precautions			
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.			

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: On land, sweep or shovel into suitable containers. Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Avoid creating or spreading dust. Provide local exhaust or general room ventilation.
Hygiene measures	: Take off immediately all contaminated clothing and wash it before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and wher leaving work. Do not eat, drink or smoke when using this product.
7.2. Conditions for safe storage, including an	ny incompatibilities
Technical measures	: Ensure adequate ventilation, especially in confined areas.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Heat sources, Direct sunlight. Keep container closed when not in use.
Incompatible products	: Strong oxidisers.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources.
Heat and ignition sources	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Storage area	: Keep frozen. Store in a dry place. Store in a closed container.
7.3. Specific end use(s)	
No edulitional information evolution	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety procedures.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:							
The protective gloves to	be used mu	ust comply w	ith the specifications of	the regulation 2016/425	and the resul	tant standard	EN 374
Туре	Material		Permeation Thickness (mm)		Penetrati	on	Standard
Disposable gloves Nitrile rubber (NBR)		6 (> 480 minutes)	0.11			EN 374	
Eye protection:							
Emergency eye wash fo designed to protect agai			ble in the immediate vio	cinity of any potential exp	oosure. Use e	ye protection	according to EN 166,
Туре		Use		Characteristics		Standard	
Safety goggles Fine dust, D		Dust	tightly fitting safety goggles, With side shields		EN 166		
Skin and body protect	ion:						
Emergency safety show clothing readily available			n the immediate vicinity	of any potential exposu	re. Keep suita	ble chemical	ly resistant protective
Туре				Standard			
Protective clothing (with elasticated cuffs and closed neck)		EN ISO 13982					
Respiratory protection	1:						
Keep self contained breat protection equipment is			available for emergenc	y use. Where exposure t	hrough inhala	tion may occ	ur from use, respirato
Device Filter type Condition Standard							
Pospiratory protoctive d	ovice with		(no D2	Dust protection		ENI 14207	

Device	Filter type	Condition	Standard
Respiratory protective device with a particle filter	Туре Р1, Туре Р2	Dust protection	EN 14387

Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties		
. Information on basic physical and chemic		
	: Solid	
pearance	: Crystalline powder.	
lecular mass	: 405.39 g/mol	
lour	: White to faint yellow.	
our	: No data available.	
our threshold	: No data available	
	: No data available	
lative evaporation rate (butylacetate=1)	: No data available	
Iting point	: No data available	
ezing point	: No data available	
ling point	: No data available	
sh point	: No data available	
to-ignition temperature	: No data available	
composition temperature	: No data available	
mmability (solid, gas)	: Non flammable.	
pour pressure	: No data available	
lative vapour density at 20 °C	: No data available	
lative density	: No data available	
ubility	: No data available	
g Pow	: No data available	
cosity, kinematic	: No data available	
cosity, dynamic	: No data available	
plosive properties	: No data available	
idising properties	: No data available	
plosive limits	: No data available	

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity			
10.1. Reactivity The product is non-reactive under normal conditions of use, storage and transport.			
•	i use, storage and transport.		
10.2. Chemical stability Stable under recommended handling and storage con-	ditions (coo soction 7)		
10.3. Possibility of hazardous reactions No dangerous reactions known under normal condition	ns of use		
10.4. Conditions to avoid			
	ces, sparks, open flames and other ignition sources. No smoking.		
10.5. Incompatible materials			
Strong oxidizers.			
10.6. Hazardous decomposition products			
No hazardous decomposition products known at room	temperature. Thermal decomposition generates : Carbon oxides (CO, CO2). Nitrogen oxides.		
Sodium Oxides. Sulphur oxides.			
SECTION 11: Toxicological information			
11.1. Information on toxicological effects			
	: Not classified		
11.1. Information on toxicological effects	: Not classified : Not classified		
11.1. Information on toxicological effects Acute toxicity (oral)			
11.1. Information on toxicological effects Acute toxicity (oral) Acute toxicity (dermal)	: Not classified		
11.1. Information on toxicological effects Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified		
11.1. Information on toxicological effectsAcute toxicity (oral)Acute toxicity (dermal)Acute toxicity (inhalation)Ceftizoxime sodium salt (68401-82-1)	: Not classified : Not classified		
11.1. Information on toxicological effects Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) Ceftizoxime sodium salt (68401-82-1) LD50 oral rat	 Not classified Not classified > 10000 mg/kg 		
11.1. Information on toxicological effects Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) Ceftizoxime sodium salt (68401-82-1) LD50 oral rat Skin corrosion/irritation	 Not classified Not classified > 10000 mg/kg : Causes skin irritation. 		
11.1. Information on toxicological effects Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) Ceftizoxime sodium salt (68401-82-1) LD50 oral rat Skin corrosion/irritation Additional information	 Not classified Not classified > 10000 mg/kg : Causes skin irritation. : Based on available data, the classification criteria are not met 		
11.1. Information on toxicological effects Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) Ceftizoxime sodium salt (68401-82-1) LD50 oral rat Skin corrosion/irritation Additional information Serious eye damage/irritation	 Not classified Not classified > 10000 mg/kg Causes skin irritation. Based on available data, the classification criteria are not met Causes serious eye irritation. 		
11.1. Information on toxicological effects Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) Ceftizoxime sodium salt (68401-82-1) LD50 oral rat Skin corrosion/irritation Additional information Serious eye damage/irritation Additional information	 Not classified Not classified > 10000 mg/kg Causes skin irritation. Based on available data, the classification criteria are not met Causes serious eye irritation. Based on available data, the classification criteria are not met 		

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: Not classified
: Based on available data, the classification criteria are not met
: Not classified
: Based on available data, the classification criteria are not met
: May cause respiratory irritation.
: Based on available data, the classification criteria are not met
: Not classified
: Based on available data, the classification criteria are not met
: Not classified
: Based on available data, the classification criteria are not met
: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information		
12.1. Toxicity		
Acute aquatic toxicity :	Not classified	
Chronic aquatic toxicity :	Not classified	
12.2. Persistence and degradability		
Ceftizoxime sodium salt (68401-82-1)		
Persistence and degradability	No data available.	
12.3. Bioaccumulative potential		
Ceftizoxime sodium salt (68401-82-1)		
Bioaccumulative potential	No data available.	
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
Ceftizoxime sodium salt (68401-82-1)		
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII		
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII		
12.6. Other adverse effects		
Additional information :	Avoid release to the environment.	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

ADR	IMDG	ΙΑΤΑ	ADN	RID
I.1. UN number		·		
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
4.5. Environmental haz	ards			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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Overland transport	
Not regulated	
Transport by sea	
Not regulated	
Air transport	
Not regulated	
Inland waterway transport	
Not regulated	
Rail transport	
Not regulated	
14.7. Transport in bulk according to Anne	ex II of Marpol and the IBC Code
Not applicable	
SECTION 15: Regulatory information	
15.1. Safety, health and environmental re	gulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations	
No REACH Annex XVII restrictions	
Ceftizoxime sodium salt is not on the REACH Car Directive 2012/18/EU (SEVESO III)	ndidate List
	ndidate List
Directive 2012/18/EU (SEVESO III)	ndidate List
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations	rdidate List : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal	
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Netherlands	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Netherlands SZW-lijst van kankerverwekkende stoffen	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) : The substance is not listed
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Netherlands SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) : The substance is not listed : The substance is not listed
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Netherlands SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding NIET-limitatieve lijst van voor de voortplanting	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) : The substance is not listed : The substance is not listed : The substance is not listed
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Netherlands SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ortubaarheid	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) : The substance is not listed : The substance is not listed : The substance is not listed : The substance is not listed
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Netherlands SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance) : The substance is not listed : The substance is not listed : The substance is not listed : The substance is not listed
Directive 2012/18/EU (SEVESO III) 15.1.2. National regulations Germany 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV Netherlands SZW-lijst van kankerverwekkende stoffen SZW-lijst van mutagene stoffen NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling Denmark	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) : The substance is not listed : The substance is not listed

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Other information : None.		
December 2008 on classification, labelling and packaging of substances and mixtures, amending and	Other information	: None.
	Data sources	

Full text of H- and EUH-statements:		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.