

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 5/13/2019 Revision date: 12/4/2019 Supersedes: 5/13/2019 Version: 1.1

SECTION 1: Identification of the s	ubstance/mixture and of the co	ompany/undertaking	
I.1. Product identifier	. Out-starses		
Product form	: Substance		
Substance name	: L-Histidine		
JPAC name	: Histidine		
C-No.	: 200-745-3		
AS-No.	: 71-00-1		
roduct code	: 16752688		
ormula	: C6H9N3O2		
roduct group	: Raw material		
.2. Relevant identified uses of the su	ubstance or mixture and uses advis	sed against	
.2.1. Relevant identified uses			
lain use category	: Laboratory use,Industrial use,P	Professional use	
ndustrial/Professional use spec	: For professional use only		
Jse of the substance/mixture	: For analytical purposes Scientific research and develop Not for human consumption or		
.2.2. Uses advised against			
lo additional information available			
.3. Details of the supplier of the safe	ty data sheet		
Scafell Organics /lolekula Ltd .ingfield Way Darlington - England <sup>-</sup> +44 (0) 1949 823777 / +44 (0) 7590 54570 nfo@molekula.com / kbowen@molekula.com			
.4. Emergency telephone number			
Emergency number	: +44 (0) 7590 545705		
SECTION 2: Hazards identificatio 2.1. Classification of the substance o			
Classification according to Regulation (Ed Not classified	C) No. 1272/2008 [CLP]		
Adverse physicochemical, human health No additional information available 2.2. Label elements	and environmental effects		
lot classified.			
.3. Other hazards			
This substance/mixture does not meet the Pl	BT criteria of REACH regulation, annex XI	11	
his substance/mixture does not meet the vF	-		
SECTION 3: Composition/informa	tion on ingredients		
Name	Product identifier	%	
L-Histidine	(CAS-No.) 71-00-1 (EC-No.) 200-745-3	100	
.2. Mixtures			
lot applicable			
ECTION 4: First aid measures			
.1. Description of first aid measures irst-aid measures general	: If possible show this sheet, if n	not available show packaging or label. Never give anything on. 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 pos for breathing. Give oxygen or artificial respiration if necessary. If breathing nersist : Get medical advice/attention		-	
		artificial respiration if necessary. If breathing difficulties	

persist : Get medical advice/attention.

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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	, both acute and delayed
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	: Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact	: Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	: May cause eye irritation. redness, itching, tears.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract. Abdominal pain, nausea.
<b>4.3. Indication of any immediate medical a</b> Treat symptomatically.	ttention and special treatment needed

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	ince or mixture
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO2). Nitrogen 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 measur	'es	
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.		
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 when leaving work. Do not eat, drink or smoke when using this product.
7.2. Conditions for safe storage, includ	ing any incompatibilities

Technical measures

: Ensure adequate ventilation, especially in confined areas.

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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. Protect from moisture.
Incompatible products	: Strong oxidizing agents.
Incompatible materials	: Sources of ignition. Direct sunlight. Heat sources. Moisture. Water, humidity.
Heat and ignition sources	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Storage area	: Store below 20 °C. Store in dry protected location to prevent any moisture contact.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Expo	sure co <u>nt</u> i	rols/pe <u>rs</u>	onal protection				
3.1. Control parame	ters						
No additional informatio							
3.2. Exposure contr							
Appropriate engineeri	•	مغربة المنبط		_			
	0	istriai riygier	e and safety procedure	S.			
Personal protective ed Avoid all unnecessary e	•••						
Avolu all unnecessary e	xposure.						
Hand protection:							
The protective gloves	o be used mu	ist comply w	ith the specifications of	the regulation 2016/425	and the result	ant standard	I EN 374
Туре	Material		Permeation	Thickness (mm)	Penetratio	on	Standard
Disposable gloves	Nitrile rubb	er (NBR)	6 (> 480 minutes)	0.11			EN 374
Eye protection:							
Emergency eye wash designed to protect ag			able in the immediate vi	cinity of any potential exp	oosure. Use ey	e protection	according to EN 166
Туре		Use		Characteristics		Standard	
Safety glasses		Fine dust, I	Dust	With side shields EN 166		EN 166	
Skin and body protec	tion:						
Emergency safety sho clothing readily availab			in the immediate vicinity	/ of any potential exposu	re. Keep suita	ble chemical	ly resistant protective
Туре			Standard				
Long sleeved protective clothing			EN ISO 13982				
Respiratory protection	n:						
No respiratory protection	on needed un	der normal u	use conditions. [In case	of inadequate ventilation	n] wear respira	tory protecti	on.
Device	Filter type		Condition	Condition		Standard	
Dust mask	Туре Р1						

## Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and ch	hemical properties	
Physical state	: Solid	
Appearance	: Crystalline powder.	
Molecular mass	: 155.15 g/mol	
Colour	: White to off-white.	
Odour	: No data available.	
Odour threshold	: No data available	
pH	: 7 - 8	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: 282 °C	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
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Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive 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.
10.2. Chemical stability
Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Moisture. Water, humidity.
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.

<b>SECTION 11: Toxicological information</b>	
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
L-Histidine (71-00-1)	
LD50 oral rat	> 15000 mg/kg
Skin corrosion/irritation	: Not classified
	pH: 7 - 8
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified
	pH: 7 - 8
Additional information	: Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

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Potential adverse human health effects and : Based on available data, the classification criteria are not met. symptoms

SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short-term : (acute)	Not classified	
Hazardous to the aquatic environment, long-term : (chronic)	Not classified	
12.2. Persistence and degradability		
L-Histidine (71-00-1)		
Persistence and degradability	No data available.	
12.3. Bioaccumulative potential		
L-Histidine (71-00-1)		
Bioaccumulative potential	No data available.	
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
L-Histidine (71-00-1)		
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.

### **SECTION 14: Transport information** In accordance with ADR / RID / IMDG / IATA / ADN ADR ΙΑΤΑ ADN IMDG RID 14.1. 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 14.5. Environmental hazards Not regulated Not regulated Not regulated Not regulated Not regulated No supplementary information available

14.6. Special precautions for user

Overland transport Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport Not regulated

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## Rail transport

### Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

## SECTION 15: Regulatory information

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

### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions L-Histidine is not on the REACH Candidate List Directive 2012/18/EU (SEVESO III)

### 15.1.2. National regulations

No additional information available

### **15.2. Chemical safety assessment**

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information	
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.

### 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.