

Date of issue: 10/04/2018

Safety Data Sheet

 Identification of the substance/mixture and of the company/undertaking Product identifier: Product name: L-Lysine monohydrochloride Product code(SDS NO): 4548E-1
 Details of the supplier of the safety data sheet Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD. Address: 3-1, Honmachibashi, Chuo-ku,Osaka 540-0029,JAPAN Division: Safety Management Dept. of Chemicals Telephone number: +81-6-6946-8061 FAX: +81-6-6946-1607 e-mail address: kagakuhinanzenkanri@kishida.co.jp

 Hazards identification GHS classification and label elements of the product Classification of the substance or mixture (Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

3. Composition/information on ingredients
Mixture/Substance selection:
Substance
Ingredient name:L-Lysine monohydrochloride
Content(%):98(min)
Chemicals No, Japan:1-215; 9-1633
CAS No.:657-27-2
ECNO:211-519-9
Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

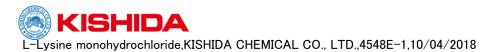


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5. Fire-fightin	
Extinguishi	-
Suitable extinguishing media Use appropriate extinguishing media suitable for surrounding facilities.	
-	ntainers may explode when heated.
	e may produce irritating, corrosive and/or toxic gases.
Advice for firefighters Specific fire-fighting measures	
	protective equipment and precautions for fire-fighters
	ar fire/flame resistant/retardant clothing.
	ar protective gloves/protective clothing/eye protection/face protection.
	efighters should wear self-contained breathing apparatus with full face peace operated
	sitive pressure mode.
	release measures
	precautions, protective equipment and emergency procedures
	ntilate area after material pick up is complete.
	ar proper protective equipment.
	nd materials for containment and cleaning up
	reep up, place in a bag and hold for waste disposal.
	measures for secondary accident
00	llect spillage.
7. Handling an	
	s for safe handling
	ve measures
	ective measures against fire and explosion)
	ep away from heat/sparks/open flames/hot surfaces. – No smoking.
	/ventilator
	haust/ventilator should be available.
	reatments
	oid contact with skin.
	oid contact with eyes.
-	leasures/Incompatibility
	ar protective gloves, protective clothing or face protection.
	en using do not eat, drink or smoke.
	for safe storage, including any incompatibilities
	nendation for storage
	ep container tightly closed.
Sto	ore in a cool, dry place. Do not store in direct sunlight.
8. Exposure c	ontrols/personal protection
Exposure c	
-	iate engineering controls
	not use in areas without adequate ventilation.
	e wash station should be available.
-	shing facilities should be available.

Washing facilities should be available.

Individual protection measures



Respiratory protection Wear respiratory protection. Hand protection Wear protective gloves. Eye protection Wear eye/face protection.

9. Physical and Chemical Properties Information on basic physical and chemical properties Physical properties Appearance: Crystal or crystalline powder Color: White Odor: Odorless or slightly characteristic odor Phase change temperature Initial Boiling Point/Boiling point data N.A. Melting point/Freezing point: 263~164°C Decomposition temperature data N.A. Flash point data N.A. Auto-ignition temperature data N.A. Explosive properties data N.A. Vapor pressure data N.A. Vapor density data N.A. Specific gravity/Density data N.A. Solubility Solubility in water: Easily soluble n-Octanol /water partition coefficient data N.A.

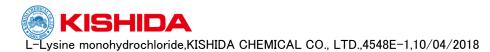
10. Stability and Reactivity
 Chemical stability
 Stable under normal storage/handling conditions.

 Conditions to avoid
 Contact with incompatible materials.
 Contact with fire source.

 Incompatible materials
 Oxidizing agents, Peroxide

 Hazardous decomposition products
 Carbon oxides, Nitrogen oxides, Chlorine, Hydrogen chloride

11. Toxicological Information
Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[Company proprietary data]
(L-Lysine monohydrochloride)
rat LD50=10.55 g/kg
No Irritant properties data available
No Allergenic and sensitizing effects data available
No Mutagenic effects data available
No Carcinogenic effects data available
No Teratogenic effects data available
No reproductive toxicity data available



No STOT-single/repeated exposure data available

No Aspiration hazard data available

Additional data

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

12. Ecological Information

Ecotoxicity

- No Aquatic toxicity data available
- No Persistence and degradability data available
- No Bioaccumulative potential data available
- No Mobility in soil data available
- Ozone depleting chemical data not available

13. Disposal considerations

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information Not applicable to UN NO.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture US major regulations TSCA

L-Lysine monohydrochloride

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

The product is not applicable to GHS classifications.

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012) 2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2017 TLVs and BEIs. (ACGIH) http://monographs.iarc.fr/ENG/Classification/index.php Supplier's data/information

Hazard Communication Standard - 2012

General Disclaimer

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this



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Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties. The GHS classification data given here is based on current Japan official data (NITE published in 2016).