

L-TRYPTOPHAN (D8, 98%; 15N2, 98%)

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 23/06/2011 Revision date: 01/02/2019 Supersedes: 11/11/2016

DNLM-6904

Version: 4.0

SECTION 1: Identification of the second	ubstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: L-TRYPTOPHAN (D8, 98%; 15N2, 98%)
EC-No.	: 200-795-6 (Unlabeled)
CAS-No.	: 73-22-3 (Unlabeled)
Product code	: DNLM-6904
Formula	: C11H4D8*N2O2
Synonyms	: (S)-2-Amino-3-(3-indolyl)propionic acid / L-alpha-Amino-3-indolepropionic acid
1.2. Relevant identified uses of the su	Ibstance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Professional use
ndustrial/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 safe	ty data sheet
Cambridge Isotope Laboratories, Inc.	
50 Frontage Road	
Andover, MA 01810 USA	
USA: 1-800-322-1174 Int: 1-978-749-8000	
<u>cilsales@isotope.com</u> www.isotope.com	
Emergency telephone number	
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)	
SECTION 2: Hazards identification	
2.1. Classification of the substance of	r mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified	
Classification according to Directive 67/54	8/EEC [DSD] or 1009/45/EC [DBD]
Not classified	
GHS-US classification	
Not classified	
Adverse physicochemical, human health a No additional information available	na environmental effects
no additional information available	
2.2. Label elements	
Labeling according to Regulation (EC) No.	1272/2008 [C] P]
No labeling applicable	

GHS-US labeling

No labeling applicable

2.3. **Other hazards**

No additional information available

01/02/2019

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1. Substances			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
L-TRYPTOPHAN (D8, 98%; 15N2, 98%)	(CAS-No.) 73-22-3 (Unlabeled) (EC-No.) 200-795-6 (Unlabeled)	100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
L-TRYPTOPHAN (D8, 98%; 15N2, 98%)	(CAS-No.) 73-22-3 (Unlabeled) (EC-No.) 200-795-6 (Unlabeled)	100	Not classified

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
L-TRYPTOPHAN (D8, 98%; 15N2, 98%) (Main constituent)	(CAS-No.) 73-22-3 (Unlabeled)	100	Not classified

Full text of H-phrases: see section 16

Mixtures 3.2.

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Move out of dangerous area. Consult a physician and show this safety data sheet.
First-aid measures after inhalation	: If breathed in, move person into fresh air. If not breathing, give artificial respiration.
First-aid measures after skin contact	: Wash off with soap and plenty of water.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water.
4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.
4.3. Indication of any immediate med	ical attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	S
5.1. Extinguishing media	
Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
5.2. Special hazards arising from the	
Reactivity	: Not available.
	. Not available.
5.3. Advice for firefighters	
Firefighting instructions	: Wear self contained breathing apparatus for fire fighting if necessary.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release m	easures
6.1. Personal precautions, protective	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Avoid dust formation. Avoid breathing vapors, mist or gas.
6.1.2. For emergency responders	
No additional information available	
6.2. Environmental precautions	
Do not let product enter drains.	
6.3. Methods and material for contain	ment and cleaning up
For containment	: Sweep up and shovel. Keep in suitable, closed containers for disposal.
6.4. Reference to other sections	

Reference to other sections **6.4**.

No additional information available

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SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
7.2. Conditions for safe storage, inclu	ling any incompatibilities
Technical measures	: Keep container tightly closed in a dry and well-ventilated place.
Storage conditions	: Store at room temperature away from light and moisture.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/per	sonal protection
8.1. Control parameters	
No additional information available	
8.2 Exposure controls	
8.2. Exposure controls Personal protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection	: Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection	: When appropriate, use NIOSH/CEN approved respirator.
SECTION 9: Physical and chemica	properties
9.1. Information on basic physical and	
Physical state	: Solid
Appearance	: Powder
Molecular mass	: 214.26 g/mol (Labeled)
Color	: White to off-white
Odor	: No data available.
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 280 - 285 °C (536 - 545 °F)
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, kinematic Viscosity, dynamic Explosive properties	 No data available No data available No data available

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9.2. Other information			
No additional information available			
SECTION 10: Stability and reactivity			
10.1. Reactivity			
Not available.			
10.2. Chemical stability			
Stable if stored under recommended conditions.			
10.3. Possibility of hazardous reactions No additional information available			
10.4. Conditions to avoid			
Not available.			
10.5. Incompatible materials			
Strong oxidizing agents.			
10.6. Hazardous decomposition products			
Formed under fire conditions: Carbon oxides, nitro	gen oxides.		
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SECTION 11: Toxicological informatio			
11.1. Information on toxicological effects	Not classified		
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L-TRYPTOPHAN (D8, 98%; 15N2, 98%) (73-22-			
LD50 oral rat	> 16000 mg/kg Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Ptosis. Behavioral:Coma. Nutritional and Gross Metabolic: Changes in: Body temperature decrease.		
Skin corrosion/irritation :	Not classified		
Serious eye damage/irritation :	Not classified		
Respiratory or skin sensitization :	Not classified		
Germ cell mutagenicity :	Not classified		
Carcinogenicity :	Not classified		
Reproductive toxicity :	Not classified		
Specific target organ toxicity – single exposure :	Not classified		
Specific target organ toxicity – repeated : exposure	Not classified		
Aspiration hazard :	Not classified		
Potential Adverse human health effects and symptoms	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Blood disorders. The Food and Drug Administration and the Center for Disease Control have established a link between I-tryptophan and a sometimes fatal blood disorder called eosinophilia-myalgia syndrome which is marked by severe muscle and joint pain, swelling of the arms and legs, skin rash, and sometimes fever. It is characterized by severe eosinophilia, a blood disorder in which the white blood cells increase to an abnormally high level. L-Tryptophan occurs naturally in many foods and investigation has not established whether it or an impurity introduced during manufacture or distribution is the cause.		
Symptoms/effects after inhalation :	May be harmful if inhaled. May cause respiratory tract irritation.		
Symptoms/effects after skin contact	May be harmful if absorbed through skin. May cause skin irritation.		
Symptoms/effects after eye contact :	May cause eye irritation.		
Symptoms/effects after ingestion :	May be harmful if swallowed.		
SECTION 12: Ecological information			

No additional information available

12.2.	Persistence and degradability	
No addit	litional information available	
12.3.	Bioaccumulative potential	
No addit	litional information available	
12.4.	Mobility in soil	
No addit	litional information available	

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12.5. Results of PBT and vPvB assessmen	t
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 12: Dispession consideration	
SECTION 13: Disposal consideration 13.1. Waste treatment methods	5
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local
Regional legislation (waste)	environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed
	professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / AD	N
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Not dangerous goods.
Overland transport	
No additional information available	
Transport by sea	
No additional information available	
Air transport	
No additional information available	
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: Not dangerous goods.
14.6. Transport in bulk according to Annex	I of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
L-TRYPTOPHAN (D8, 98%; 15N2, 98%) (73-22	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations CANADA

L-TRYPTOPHAN (D8, 98%; 15N2, 98%) (73-22-3 (Unlabeled))	
Listed on the Canadian DSL (Domestic Substances List)	
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National regulations 15.2.1.

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15.3. US State regulations		
L-TRYPTOPHAN (D8, 98%; 15N2, 98%)(73-22-3 (Unlabeled))		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
State or local regulations	U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List	

SECTION 16: Other information

NFPA health hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard Rating	
Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

CIL Substance SDS

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