

Part of Thermo Fisher Scientific

SAFETY DATA SHEET

Creation Date 12-May-2011	Revision Date 10-Feb-2015	Revision Number 1
	1. Identification	
Product Name	L(-)-Proline	
Cat No. :	BP392-100	
Synonyms	(S)-Pyrrolidine-2-Carboxylic Acid.	
Recommended Use	Laboratory chemicals.	
Uses advised against Details of the supplier of the safety	No Information available data sheet	
Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100	Emergency Telephone Number CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 001-703-527-3887	

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition / information on ingredients

Component		CAS-No	Weight %		
L	-Proline	147-85-3	> 99		
	4. Fi	rst-aid measures			
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.				
Skin Contact	Wash off immed	liately with soap and plenty of water	while removing all contaminated		

	clothes and shoes.
Inhalation	Remove from exposure, lie down. Move to fresh air.
Ingestion	Clean mouth with water. Get medical attention.
Most important symptoms/effects Notes to Physician	No information available. Treat symptomatically

5. Fire-fighting measures

	0 0
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO 2). Dry chemical. chemical foam.
Unsuitable Extinguishing Media	No information available
Flash Point Method -	No information available No information available
Autoignition Temperature Explosion Limits	Not applicable
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impac	t No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Nitrogen oxides (NOx) Carbon monoxide (CO) Carbon dioxide (CO₂) **Protective Equipment and Precautions for Firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<u>NFPA</u>

Health	Flammability	Instability	Physical hazards
1	1	0	N/A
	6. Accidental rel	ease measures	
Personal Precautions	Ensure adequate ventilatio	n. Use personal protective equ	lipment.
Environmental Precautions	See Section 12 for addition	al ecological information.	

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Up

	7. Handling and storage
Handling	Avoid contact with skin and eyes. Avoid dust formation in confined areas. Do not breathe dust. Do not ingest.
Storage	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from direct sunlight.
	8. Exposure controls / personal protection
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Measures	None under normal use conditions.

Personal Protective Equipment

Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	No protective equipment is needed under normal use conditions.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Powder Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
рН	5.5-7.0 2.5% aq.sol
Melting Point/Range	228 - 233 °C / 442.4 - 451.4 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	negligible
Vapor Density	Not applicable
Relative Density	1.350
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	Not applicable
Decomposition Temperature	> 185°C
Viscosity	Not applicable
Molecular Formula	C5 H9 N O2
Molecular Weight	115.13

10. Stability and reactivity

Reactive Hazard	None known, based on information available			
Stability	Stable under normal conditions.			
Conditions to Avoid	Exposure to light. Incompatible products. Exposure to moist air or water. Avoid dust formation.			
Incompatible Materials	Strong oxidizing agents			
Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)				
Hazardous Polymerization	Hazardous polymerization does not occur.			
Hazardous Reactions	None under normal processing.			
	11. Toxicological information			
Acute Toxicity				
Product Information	No acute toxicity information is available for this product			

Component Informa Toxicologically Syn Products Delayed and immed	ergistic	No information ava		<u>nd long-term expo</u>	osure_				
rritation		May cause eye, sk							
Sensitization		No information available							
Carcinogenicity		The table below indicates whether each agency has listed any ingredient as a carcinogen							
Component	CAS-No	IARC	IARC NTP ACGIH OSHA N						
L-Proline	147-85-3	Not listed	Not listed	Not listed	Not listed	Not listed			
Mutagenic Effects		No information ava	ilable						
Reproductive Effect	ts	No information ava	ilable.						
Developmental Effe	cts	No information ava	ilable.						
Teratogenicity		No information ava	ilable.						
STOT - single expos STOT - repeated exp		None known None known							
Aspiration hazard		No information ava	ilable						
Symptoms / effects delayed	ms / effects, both acute and No information available								
Endocrine Disruptor Information No information available									
Other Adverse Effect	cts	The toxicological properties have not been fully investigated.							
		12. Ecolo	ogical infor	mation					
<u>Ecotoxicity</u> Do not empty into dra	ains.								
Persistence and Deg Bioaccumulation/ A		Soluble in water Persistence is unlikely based on information available. n No information available.							
Mobility		Will likely be mobile in the environment due to its water solubility.							
			sal conside						
Waste Disposal Met	hods	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.							
			sport infor	mation					
DOT		Not regulated							
TDG		Not regulated							
IATA IMDG/IMO		Not regulated Not regulated							
		15. Regu	latonuinfo	mation					

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
L-Proline	Х	Х	-	205-702-2	-		Х	-	Х	Х	Х

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)	Not applicable
SARA 313	Not applicable
SARA 311/312 Hazardous Catego Acute Health Hazard Chronic Health Hazard Fire Hazard Sudden Release of Pressure H Reactive Hazard	No No No
Clean Water Act	Not applicable
Clean Air Act	Not applicable
OSHA Occupational Safety and Heal Not applicable	alth Administration
CERCLA Not applicable	
California Proposition 65	This product does not contain any Proposition 65 chemicals
State Right-to-Know	Not applicable
U.S. Department of Transportatio	n
Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N
U.S. Department of Homeland Sec This product does not contain any D	
Other International Regulations	
Mexico - Grade	No information available
Canada This product has been classified the MSDS contains all the informa	in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and ation required by the CPR
WHMIS Hazard Class	Non-controlled
	16. Other information

Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Creation Date Revision Date Print Date Revision Summary	12-May-2011 10-Feb-2015 10-Feb-2015 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS