

SAFETY DATA SHEET

Revision Date 26-Dec-2021

Revision Number 5

	1. Identification					
Product Name	D(-)Prolinol					
Cat No. :	AC418310000; AC418310010; AC418310020; AC418310050; AC418315000					
CAS No Synonyms	68832-13-3 (R)-(-)-2-Hydroxymethylpyrrolidine					
Recommended Use Uses advised against	Laboratory chemicals. Food, drug, pesticide or biocidal product use.					
Details of the supplier of the sa	fety data sheet					
<u>Company</u> Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100	Acros Organics One Reagent Lane Fair Lawn, NJ 07410					

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 4 Category 2 Category 2 Category 3

Label Elements

Signal Word Warning

Hazard Statements Combustible liquid Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep cool

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

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

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

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

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component		CAS No	Weight %				
2-Pyrrolidineme	2-Pyrrolidinemethanol, (2R)-		99				
	4.	First-aid measures					
General Advice	If symptoms	persist, call a physician.					
Eye Contact		Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.					
Skin Contact		Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.					
Inhalation	Remove to free symptoms or	esh air. If not breathing, give artificial ccur.	respiration. Get medical attention if				

Ingestion	Clean mouth with water and drink afterwards plenty of water.
Most important symptoms and effects Notes to Physician	None reasonably foreseeable. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO $_2$). Dry chemical. Alcohol resistant foam. Water mist may be used to cool closed containers.
Unsuitable Extinguishing Media	No information available
Flash Point	No information available 86 °C / 186.8 °F
Method -	No information available
Autoignition Temperature Explosion Limits	No information available
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 Combustible material. Containers may explode when heated.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NOx).

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.

NFPA

Health 2	Flammability 2	Instability 1	Physical hazards N/A							
	6. Accidental re	lease measures								
Personal Precautions	sources of ignition. Take p	recautionary measures agains	uipment as required. Remove all t static discharges.							
Environmental Precautions	Should not be released int	Should not be released into the environment.								
Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.UpRemove all sources of ignition.										
7. Handling and storage										
Handling		clothing. Avoid ingestion and in	sure adequate ventilation. Do not nhalation. Keep away from open							
Storage.	age. Keep container tightly closed. Keep refrigerated. Store under an inert atmosphere. Prote from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. Ke away from heat, sparks and flame. Incompatible Materials. Strong oxidizing agents. Wa									
8.	Exposure controls	/ personal protecti	on							
Exposure Guidelines	This product does not cont	tain any hazardous materials w	vith occupational exposure							

limitsestablished by the region specific regulatory bodies.

Personal Protective Equipment eyewash stations and safety showers are close to the Eye/face Protection Wear appropriate protective eyeglasses or chemical of SHA's eye and face protection regulations in 29 CF EN166.	Ensure adequate ventilation, especially in confined areas. Ventilation systems. Ensure that eyewash stations and safety showers are close to the workstation location.
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

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Physical State	Liquid
Appearance	Light yellow
Odor	Odorless
Odor Threshold	No information available
рН	No information available
Melting Point/Range	No data available
Boiling Point/Range	75 °C / 167 °F @ 2 mm Hg
Flash Point	No information available 86 °C / 186.8 °F
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	1.020
Solubility	miscible
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	C5 H11 N O
Molecular Weight	101.15
-	

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions. Hygroscopic.
Conditions to Avoid	Incompatible products. Exposure to moist air or water. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials	Strong oxidizing agents, Water
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)
Hazardous Polymerization	No information available.

Hazardous Reactions	None under norma	None under normal processing.						
	11. Toxico	ological info	rmation					
Acute Toxicity								
Product Information	No acute toxicity in	nformation is availa	ble for this product	t				
Component Information Toxicologically Synergistic Products	No information ava	ailable						
Delayed and immediate effects as w	ell as chronic effe	cts from short an	d long-term expo	<u>sure</u>				
Irritation	No information ava	information available						
Sensitization	No information ava	ailable						
Carcinogenicity	The table below in	dicates whether ea	ich agency has list	ed any ingredient a	as a carcinogen.			
ComponentCAS No2-Pyrrolidinemethanol,68832-13-3	IARC	NTP	ACGIH	OSHA Nat listad	Mexico			
2-Pyrrolidinemethanol, 68832-13-3 (2R)-	Not listed	Not listed	Not listed	Not listed	Not listed			
Mutagenic Effects	No information ava	ailable						
Reproductive Effects	No information ava	ailable.						
Developmental Effects	No information ava	ailable.						
Teratogenicity	No information ava	ailable.						
STOT - single exposure STOT - repeated exposure	Respiratory system None known							
Aspiration hazard	No information available							
Symptoms / effects,both acute and delayed	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting							
Endocrine Disruptor Information	No information ava	ailable						
Other Adverse Effects	The toxicological p	roperties have not	been fully investig	ated.				
	12. Ecological information							
<u>Ecotoxicity</u> Do not empty into drains.								
Persistence and Degradability	Persistence is unli	kely based on infor	mation available.					
Bioaccumulation/ Accumulation	No information ava	ailable.						
Mobility	Will likely be mobil	e in the environme	nt due to its volatili	ty.				
	13. Dispo	sal conside	rations					
Waste Disposal Methods	Chemical waste ge hazardous waste.	13. Disposal considerations 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.						
	14. Tran	sport inforr	nation					
DOT	COMBUSTIBLE LI According to 49 CI	QUID, NOT REGL	JLATED FOR TR					

Combustible Liquid, NOS if it is shipped in bulk.

UN-No	NA1993
Proper Shipping Name	Combustible liquid, n.o.s.
Packing Group	
TDG	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
	15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags	
2-Pyrrolidinemethanol, (2R)-	68832-13-3	-	-	-	

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
2-Pyrrolidinemethanol, (2R)-	68832-13-3	-	-	-	-	-		-	-	-

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals.
California Proposition 65 U.S. State Right-to-Know Regulations	This product does not contain any Proposition 65 chemicals. Not applicable
U.S. State Right-to-Know	

Security

Other International Regulations

Mexico - Grade

No information available

Authorisation/Restrictions according to EU REACH

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
2-Pyrrolidinemethanol, (2R)-	68832-13-3	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
2-Pyrrolidinemethanol, (2R)-	68832-13-3	Not applicable	Not applicable	Not applicable	Not applicable

	16. Other information
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com
Revision Date Print Date Revision Summary	26-Dec-2021 26-Dec-2021 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 in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of SDS