

SAFETY DATA SHEET

Creation Date 09-May-2014

Revision Date 24-Dec-2021

Revision Number 4

1. Identification

Product Name

3-Heptanol

Cat No. : AC149090000, AC149090250, AC149091000, AC149095000

CAS No Synonyms 589-82-2 Butyl ethyl carbinol.

Recommended Use Uses advised against Laboratory chemicals.

Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety 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	Category 3
Acute oral toxicity	Category 4

Label Elements

Signal Word Warning

Hazard Statements Flammable liquid and vapor Harmful if swallowed



Precautionary Statements Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical/ventilating/lighting equipment Use only non-sparking tools Take precautionary measures against static discharge Wear protective gloves/protective clothing/eye protection/face protection Skin IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Ingestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Fire In case of fire: Use CO2, dry chemical, or foam for extinction Storage Store in a well-ventilated place. Keep cool 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 %		
3-Heptanol	589-82-2	>95		
	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. Ge 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 fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.			
Ingestion	Clean mouth with water and drink afterwards plenty of water.			
Most important symptoms and effects Notes to Physician	Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tirednes nausea and vomiting Treat symptomatically			

	5. Fire-fightir	ng measures			
Suitable Extinguishing Media	Water spray, carbon dioxic be used to cool closed cor		ol-resistant foam. Water mist may		
Unsuitable Extinguishing Media	Do not use a solid water st	ream as it may scatter and sp	read fire		
Flash Point	55 °C / 131 °F				
Method -	No information available				
Autoignition Temperature No information available Explosion Limits					
Specific Hazards Arising from the C Flammable. Containers may explode v gnition and flash back.		orm explosive mixtures with air	. Vapors may travel to source of		
Hazardous Combustion Products Carbon monoxide (CO). Carbon dioxic Protective Equipment and Precautic	ons for Firefighters				
	athing apparatus pressure-d	lemand, MSHA/NIOSH (appro	ved or equivalent) and full		
protective gear. <u>NFPA</u> Health	Flammability	Instability	Physical hazards		
protective gear.					
protective gear. <u>NFPA</u> Health 2	Flammability 2 6. Accidental re	Instability 0 lease measures	Physical hazards N/A		
Personal Precautions	Flammability 2 6. Accidental re Use personal protective ec sources of ignition. Take p	Instability 0 lease measures	Physical hazards N/A adequate ventilation. Remove all		
Personal Precautions Environmental Precautions	Flammability 2 6. Accidental re Use personal protective ec sources of ignition. Take p Should not be released inte Information.	Instability 0 Iease measures upment as required. Ensure recautionary measures agains o the environment. See Sectio	Physical hazards N/A adequate ventilation. Remove all st static discharges. In 12 for additional Ecological closed containers for disposal.		
Protective gear. NFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clear	Flammability 2 6. Accidental re Use personal protective ec sources of ignition. Take p Should not be released inte Information.	Instability 0 Iease measures puipment as required. Ensure a recautionary measures agains the environment. See Section on the environment. See Section ent material. Keep in suitable, of tion. Use spark-proof tools an	Physical hazards N/A adequate ventilation. Remove all st static discharges. In 12 for additional Ecological closed containers for disposal.		
protective gear. <u>NFPA</u> Health	Flammability 2 6. Accidental re Use personal protective ec sources of ignition. Take p Should not be released inte Information. Soak up with inert absorbe Remove all sources of ignit 7. Handling Wear personal protective ec get in eyes, on skin, or on	Instability 0 Iease measures uppment as required. Ensure recautionary measures agains to the environment. See Section on the environment. See Section ent material. Keep in suitable, of tion. Use spark-proof tools an and storage equipment/face protection. Ensibility clothing. Avoid ingestion and in ources of ignition. Use only no	Physical hazards N/A adequate ventilation. Remove all st static discharges. In 12 for additional Ecological closed containers for disposal. d explosion-proof equipment.		
Personal Precautions Environmental Precautions Methods for Containment and Clear Up	Flammability 2 6. Accidental re Use personal protective ec sources of ignition. Take p Should not be released inte Information. Soak up with inert absorbe Remove all sources of ignit 7. Handling Wear personal protective ec get in eyes, on skin, or on flames, hot surfaces and s precautionary measures and Keep container tightly clos	Instability 0 Iease measures uppment as required. Ensure a recautionary measures agains to the environment. See Section on the environment. See Section ent material. Keep in suitable, of tion. Use spark-proof tools an and storage equipment/face protection. Ensi- clothing. Avoid ingestion and it ources of ignition. Use only no gainst static discharges. ed in a dry and well-ventilated	Physical hazards N/A adequate ventilation. Remove all at static discharges. In 12 for additional Ecological closed containers for disposal. d explosion-proof equipment. sure adequate ventilation. Do no nhalation. Keep away from open on-sparking tools. Take		
Personal Precautions Environmental Precautions Methods for Containment and Clear Up Handling Storage.	Flammability 2 6. Accidental re Use personal protective ec sources of ignition. Take p Should not be released inte Information. Soak up with inert absorbe Remove all sources of igni 7. Handling Wear personal protective e get in eyes, on skin, or on flames, hot surfaces and s precautionary measures and Keep container tightly clos sparks and flame. Incomp	Instability 0 Iease measures uppment as required. Ensure a recautionary measures agains to the environment. See Section on the environment. See Section ent material. Keep in suitable, of tion. Use spark-proof tools an and storage equipment/face protection. Ensi- clothing. Avoid ingestion and it ources of ignition. Use only no gainst static discharges. ed in a dry and well-ventilated	Physical hazards N/A adequate ventilation. Remove all at static discharges. In 12 for additional Ecological closed containers for disposal. d explosion-proof equipment. sure adequate ventilation. Do no nhalation. Keep away from open on-sparking tools. Take place. Keep away from heat, ting agents. Acids. Acid chlorides		
Personal Precautions Environmental Precautions Methods for Containment and Clear Up Handling Storage.	Flammability 2 6. Accidental re Use personal protective ec sources of ignition. Take p Should not be released inter Information. Soak up with inert absorbe Remove all sources of igni 7. Handling Wear personal protective ec get in eyes, on skin, or on flames, hot surfaces and s precautionary measures as Keep container tightly clos sparks and flame. Incomp	Instability 0 Iease measures uppment as required. Ensure a recautionary measures agains to the environment. See Section ent material. Keep in suitable, of tion. Use spark-proof tools an and storage equipment/face protection. Ens clothing. Avoid ingestion and i ources of ignition. Use only no gainst static discharges. ed in a dry and well-ventilated atible Materials. Strong oxidiz	Physical hazards N/A adequate ventilation. Remove all at static discharges. In 12 for additional Ecological closed containers for disposal. d explosion-proof equipment. sure adequate ventilation. Do no nhalation. Keep away from open on-sparking tools. Take place. Keep away from heat, ting agents. Acids. Acid chlorides		

electrical/ventilating/lighting equipment.

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	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

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9. Physica	I and chemical properties
Physical State	Liquid
Appearance	Colorless to pale yellow
Odor	Herbaceous
Odor Threshold	No information available
рН	No information available
Melting Point/Range	C°
Boiling Point/Range	156 °C / 312.8 °F @ 760 mmHg
Flash Point	55 °C / 131 °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	1 hPa @ 20 °C
Vapor Density	4.01
Specific Gravity	.8180
Solubility	Slightly soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available
Molecular Formula	C7H16O
Molecular Weight	116.20
10.01	

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials	Strong oxidizing agents, Acids, Acid chlorides
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	No information available.
Hazardous Reactions	None under normal processing.
	11. Toxicological information

Acute Toxicity

Product Information

Component Information									
Componer		LD50 Oral		LD50 Dermal LC50 In					
3-Heptanol 1870 mg/kg (Rat)		1870 mg/kg (Rat)		360 μL/kg (Rabbit) 00 mg/kg (Rabbit)	No	t listed			
Toxicologically Syr Products Delayed and immed	-		No information available						
Irritation		No information availab	ble						
Sensitization		No information availab	ble						
Carcinogenicity		The table below indica	ates whether e	each agency has lis	ted any ingredient	as a carcinogen.			
Component	CAS N		NTP	ACGIH	OSHA	Mexico			
3-Heptanol	589-82-	2 Not listed	Not listed	Not listed	Not listed	Not listed			
Mutagenic Effects		No information availab	ble						
Reproductive Effec	ts	No information availab	ole.						
Developmental Effe	ects	No information availab	ole.						
Teratogenicity		No information availab	ole.						
STOT - single expo STOT - repeated ex	None known None known								
Aspiration hazard		No information availab	No information available						
Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vo delayed					ea and vomiting				
Endocrine Disruptor Information		n No information availab	No information available						
Other Adverse Effe	cts	The toxicological prop	The toxicological properties have not been fully investigated.						
12. Ecological information									
Ecotoxicity Do not empty into dr	ains.								
Persistence and Degradability Insoluble in water May persist based on information available.									
Bioaccumulation/ A	Bioaccumulation/ Accumulation No information available.								
Mobility Is not likely mobile in the environment due its low water solubil			r solubility.						
		13. Disposa	al consid	erations					
Waste Disposal Me	Vaste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification					jional, and			
		14. Transp	ort infor	mation					
DOTProper Shipping NameALCOHOLS, N.O.S.Hazard Class3Packing GroupIII									

TDG	
UN-No	1987
Proper Shipping Name	ALCOHOLS, N.O.S.
Hazard Class	3
Packing Group	111
IATA	
UN-No	UN1987
Proper Shipping Name	ALCOHOLS, N.O.S.
Hazard Class	3
Packing Group	111
IMDG/IMO	
UN-No	UN1987
Proper Shipping Name	ALCOHOLS, N.O.S.
Hazard Class	3
Packing Group	III
	15. Regulatory

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
3-Heptanol	589-82-2	Х	ACTIVE	-

information

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
3-Heptanol	589-82-2	-	Х	209-661-1	Х	Х	Х	Х	-	KE-18300

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.
U.S. State Right-to-Know Regulations	Not applicable

U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N
U.S. Department of Homeland Security	This product does not contain any DHS chemicals.
Other International Regulations	
Mexico - Grade	Moderate risk, Grade 2

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)
3-Heptanol	589-82-2	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)
3-Heptanol	589-82-2	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information				
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com			
Creation Date Revision Date Print Date Revision Summary	09-May-2014 24-Dec-2021 24-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