

This safety data sheet was created pursuant to the requirements of: OSHA HCS2012

Revision date 21-Jun-2024

Revision Number 1

1. Identification	
Product identifier	
Product Name	Bis(2-ethylhexyl) Fumarate
Other means of identification	
Product Code(s)	TRC-B592035-10ML
Synonyms	None
Recommended use of the chemical	and restrictions on use
Recommended use	This product is for research and development only
Restrictions on use	Not to be used for human or animal consumption
Details of the supplier of the safety	data sheet
Supplier Address	
VHG LGC Standards 276 Abby Road Manchester, NH 03103 UNITED STATES OF AMERICA	
Tel :+1 (603) 622-7660 Fax : +1 (603) 622-5180 Email : Igcusa@Igcgroup.com	
Web : Igcstandards.com	
E-mail	sds-request@lgcgroup.com
Emergency telephone number	
Emergency Telephone For Hazardous Materials or Dangerous Spill, Leak, Fire Exposure, or Accident Call CHEMTREC: USA & Canada 1-800-424-9300 Rest of the world +1 703-741-3877	
2. Hazard(s) identification	



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Classification

Chronic aquatic toxicity

Category 2

Hazards not otherwise classified (HNOC) Not applicable

Label elements

Hazard statements_____ Toxic to aquatic life with long lasting effects



Precautionary Statements - Response

Other information

No information available.

3. Composition/information on ingredients

Substance

Formula

C20H36O4

Chemical name	CAS No.	Weight-%	Trade secret
Bis(2-ethylhexyl) Fumarate	141-02-6	100	*

4. First-aid measures

Description of first aid measures

Inhalation

Remove to fresh air.



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Eye contact	Rinse thoroughly with plenty of water for Consult a physician.	at least 15 minutes, lifting lower and upper eyelids.
Skin contact	Wash skin with soap and water.	
Ingestion	Rinse mouth.	
Most important symptoms	and effects, both acute and delayed	
Symptoms	No information available.	
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	

5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Explosion data Sensitivity to mechanical impac	st None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.



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Methods for cleaning up	Pick up and transfer to properly labeled containers.		
7. Handling and storage			
Precautions for safe handling			

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.
Conditions for safe storage, includ	ing any incompatibilities
Storage Conditions	Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls		
Engineering controls	Showers Eyewash stations Ventilation systems.	
Individual protection measures, su	ch as personal protective equipment	
Eye/face protection	Avoid contact with eyes. Wear safety glasses with side shields (or goggles).	
Hand protection	The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.	
Skin and body protection	Wear suitable protective clothing.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are	



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exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls	Do not allow into any sewer, on the ground or into any body of water.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

9. Physical and chemical properties

Information on basic pr	iysical and chemical properties
Physical state	Liquid

i nysicai siale	Liquiu
Appearance	Oily
Color	colorless
Odor	No information available
Odor threshold	No information available

Broporty	Values	Remarks • Method
<u>Property</u> pH	No data available	None known
•	No data available	None known
Melting point / freezing point		None known
Initial boiling point and boiling rang	No data available	None known
Flash point		
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	340.5	
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	
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10. Stability and reactivity		
Reactivity	No information available.	
Chemical stability	Stable under normal conditions.	
Possibility of hazardous reactions	None under normal processing.	
Conditions to avoid	None known based on information supplied.	
Incompatible materials	None known based on information supplied.	
Hazardous decomposition products None known based on information supplied.		

11. Toxicological information	

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.
Symptoms related to the physical, of	chemical and toxicological characteristics
Symptoms	No information available.
Acute toxicity	

Numerical measures of toxicity

Component Information

	Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
E	Bis(2-ethylhexyl) Fumarate = 29200 mg/kg (Rat) 141-02-6		> 20 mL/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

No information available.



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Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.
12. Ecological information	

12. Ecological Information		
Ecotoxicity	Toxic to aquatic life with long lasting effects.	
Persistence and degradability	No information available.	
Bioaccumulation	There is no data for this product.	
Other adverse effects	No information available.	



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13. Disposal considerations	
Disposal methods	

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. Transport information

DOT

UN number or ID number	UN3082
	Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate)
Transport hazard class(es)	9
Packing group	III
Special Provisions	8, 146, 173, 335, 441, IB3, T4, TP1, TP29
DOT Marine Pollutant	1
Marine pollutant	Bis(2-ethylhexyl) Fumarate
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate),
	9, III, Marine pollutant
Emergency Response Guide	171
Number	
<u>TDG</u>	
UN number or ID number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate)
Transport hazard class(es)	9
Packing group	
Special Provisions	16, 99
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate),
	9, III
MEX	
UN number or ID number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate)
Transport hazard class(es)	9
Packing group	
Technical Name	Bis(2-ethylhexyl) Fumarate
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate),
	9, III
Special Provisions	274, 331, 335, 375
IATA	
UN number or ID number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate)



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Transport hazard class(es) Packing group Technical Name Description Special Provisions ERG Code	9 III Bis(2-ethylhexyl) Fumarate UN3082, Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate), 9, III A97, A158, A197, A215 9L
IMDGUN number or ID numberUN proper shipping nameTransport hazard class(es)Packing groupEmS-No.Special ProvisionsMarine pollutantMarine PollutantDescription	UN3082 Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate) 9 III F-A, S-F 274, 335, 969 P Bis(2-ethylhexyl) Fumarate UN3082, Environmentally hazardous substance, liquid, n.o.s. (Bis(2-ethylhexyl) Fumarate), 9, III, Marine pollutant

15. Regulatory information

International Inventories

TSCA

LGC, to the best of its ability, has confirmed that the chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021.".

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Bis(2-ethylhexyl) Fumarate	141-02-6	Present	Active

DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECI	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AIIC	Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List



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- **EINECS/ELINCS** European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- $\ensuremath{\mathsf{ENCS}}$ Japan Existing and New Chemical Substances
- **IECSC** China Inventory of Existing Chemical Substances
- **KECL** Korean Existing and Evaluated Chemical Substances
- **PICCS** Philippines Inventory of Chemicals and Chemical Substances
- AICS Australian Inventory of Chemical Substances

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information



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NFPA HMIS	Health hazards 0 Health hazards 0	Flammability 0 Flammability 0	Instability 0 Physical hazards 0	Special hazards - Personal protection X
Legend Section	abbreviations and acronyms 8: Exposure controls/person	al protection		
TWA Ceiling	TWA (time-weighted average) Maximum limit value) STEL Sk*	Stel (Short Ter Skin designation	rm Exposure Limit) I
Agency for Toxic S U.S. Environmenta European Food Sa Environmental Pro Acute Exposure G U.S. Environmenta V.S. Environmenta Food Research Jo Hazardous Substa International Unifo Japan GHS Classi Australia National NIOSH (National In National Library of National Library of U.S. National Toxic New Zealand's Ch Organization for Ed Organization for Ed World Health Orga	uideline Level(s) (AEGL(s)) al Protection Agency Federal In al Protection Agency High Prod urnal ance Database rm Chemical Information Datab fication Industrial Chemicals Notificatio nstitute for Occupational Safety Medicine's ChemID Plus (NLM Medicine's PubMed database cology Program (NTP) emical Classification and Inforr conomic Co-operation and Dev conomic Co-operation and Dev anization	try (ATSDR) v Database secticide, Fungicide, and F uction Volume Chemicals base (IUCLID) n and Assessment Schem v and Health) 1 CIP) (NLM PUBMED) nation Database (CCID) relopment Environment, He relopment High Production relopment Screening Inform	Rodenticide Act e (NICNAS) ealth, and Safety Publicatio Volume Chemicals Progra	
Revision date Revision Note <u>Disclaimer</u> The information i	21-Jun-20 No inform n this Safety Data Sheet mee	ation available.	e United States OCCUP/	ATIONAL SAFETY AND

The information in this Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. This chemical may interact with other substances. Since the potential uses are so varied, we cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. We warrant that the chemical meets the specifications set forth on the label. We (LGC/VHG/ARMI) disclaim any other warranties, expressed or implied with regard to the product supplied hereunder, its merchantability or its fitness for a particular purpose. The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. Read all precautionary information.

End of Safety Data Sheet