GHEMSERVICE.

SAFETY DATA SHEET

1. Identification

Product identifier	Bis(2-butoxyethyl)adipate	
Other means of identification		
Item	NG-11209	
Recommended use	For Laboratory Use Only	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/	Distributor information	
Manufacturer		
Company name	Chem Service, Inc.	
Address	660 Tower Lane	
	West Chester, PA 19380 United States	
Telephone	Toll Free	800-452-9994
	Direct	610-692-3026
Website	www.chemservice.com	
E-mail	info@chemservice.com	
Emergency phone number	Chemtrec US	800-424-9300
	Chemtrec outside US	+1 703-527-3887
2. Hazard(s) identification		
Physical hazards	Not classified.	
Health hazards	Not classified.	
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Hazard symbol	None.	
Signal word	None.	
Hazard statement	The substance does not meet t	he criteria for classification.
Precautionary statement		
Prevention	Observe good industrial hygien	e practices.
Response	Wash hands after handling.	

ResponseWash hands after handling.StorageStore away from incompatible materials.DisposalDispose of waste and residues in accordance with local authority requirements.Hazard(s) not otherwise
classified (HNOC)None known.

Supplemental information

Substances

3. Composition/information on ingredients

Chemical name	Common name and synonyms	CAS number	%
Bis(2-butoxyethyl)adipate		141-18-4	100
4. First-aid measures			
Inhalation	Move to fresh air. Call a physician if symptoms d	evelop or persist.	
Skin contact	Wash off with soap and water. Get medical atten	tion if irritation develops a	and persists.
Eye contact	Rinse with water. Get medical attention if irritatio	n develops and persists.	
Ingestion	Rinse mouth. Get medical attention if symptoms	occur.	

None.

Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Observe good industrial hygiene practices.
Conditions for safe storage,	Store in original tightly closed container. Store away from incompatible materials (see Section 10
including any incompatibilities	of the SDS).

8. Exposure controls/personal protection

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Occupational exposure limits	No exposure limits noted for ingredient(s).	
Biological limit values	No biological exposure limits noted for the ingredient(s).	
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.	
Individual protection measures, such as personal protective equipment		
Eye/face protection	Wear safety glasses with side shields (or goggles).	
Skin protection		
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.	
Other	Wear suitable protective clothing.	
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.	
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.	
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	

9. Physical and chemical properties

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Appearance	
Physical state	Liquid.
Form	Liquid Liquid.
Color	Light brown.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.000005 kPa at 25 °C
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Molecular formula	C18H34O6
Oxidizing properties	Not oxidizing.
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10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure		
Inhalation	No adverse effects due to inhalation are expected.	
Skin contact	No adverse effects due to skin contact are expected.	
Eye contact	Direct contact with eyes may cause temporary irritation.	
Ingestion	Expected to be a low ingestion hazard.	

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity			
Product	Species	Test Results	
Bis(2-butoxyethyl)adipate (CAS	141-18-4)		
<u>Acute</u>			
Dermal			
LD50	Rat	> 2000 mg/kg, 24 Hours	
* Estimates for product may	be based on additional compone	ent data not shown.	
Skin corrosion/irritation	Prolonged skin contact may	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.		
Respiratory or skin sensitizati	on		
Respiratory sensitization	Not a respiratory sensitizer.	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate mutagenic or genotoxic.	product or any components present at greater than 0.1% are	
Carcinogenicity	This product is not considere	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
US. OSHA Specifically Re Not listed.	gulated Substances (29 CFR 1	910.1001-1050)	
Reproductive toxicity	This product is not expected	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	- Not classified.		
Specific target organ toxicity - repeated exposure	- Not classified.		
Aspiration hazard	Not an aspiration hazard.		
12 Ecological informativ	n		

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

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US federal regulations	This product is not known to Communication Standard, 2		nemical" as defined by the OS	HA Hazard
TSCA Section 12(b) Export	Notification (40 CFR 707, Su	bpt. D)		
Not regulated. CERCLA Hazardous Substa	nce List (40 CFR 302.4)			
Bis(2-butoxyethyl)adipate SARA 304 Emergency relea	. ,	Listed.		
Not regulated. US. OSHA Specifically Regu	ulated Substances (29 CFR 1	910.1001-1050)		
Not listed.	,			
Superfund Amendments and Re	authorization Act of 1986 (S	ARA)		
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No			
SARA 302 Extremely hazard	dous substance			
Not listed.				
SARA 311/312 Hazardous chemical	Yes			
SARA 313 (TRI reporting)				
Chemical name		CAS number	% by wt.	
Bis(2-butoxyethyl)adipate	9	141-18-4	100	
Other federal regulations				
Other federal regulations				
Clean Air Act (CAA) Section	112 Hazardous Air Pollutan	nts (HAPs) List		
Clean Air Act (CAA) Section Bis(2-butoxyethyl)adipate	e (CAS 141-18-4)		68 130)	
Clean Air Act (CAA) Section Bis(2-butoxyethyl)adipate Clean Air Act (CAA) Section			68.130)	
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US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	09-16-2016
Revision date	09-22-2016
Version #	02
NFPA ratings	Health: 1 Flammability: 0 Instability: 0
Disclaimer	The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc. Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs,
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