

Safety Data Sheet per OSHA HazCom 2012

per OSHA HazCom 2012	Printing date 11/23/2015 Reviewed on 04/03/2013
1 Identification Product identifier Product name: Nepsilon-Benzyloxycarbonyl-Nalpha-Boc-L-lysine Stock number: H59537 CAS Number: 2389-45-9 EC number:	
219-221-0 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc.	
30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-343-0660 Fax: 800-322-4757 Email: tech@alfa.com www.alfa.com Information Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24	at (866) 028-0780
2 Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) The substance is not classified according to the Globally Harmonized System (GHS). Hazards not otherwise classified No information known.	al (000) 920-0709.
Label elements GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) HEALTH I Health (acute effects) = 1 Flammability = 1 Physical Hazard = 1	
Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.	
3 Composition/information on ingredients Chemical characterization: Substances CAS# Description: 2389-45-9 Nepsilon-Benzyloxycarbonyl-Nalpha-Boc-L-lysine Identification number(s): EC number: 219-221-0	
 4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available. 	
5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol re- Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	sistant foam.
6 Accidental release measures Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Pick up mechanically.	(Contd. on page 2) USA

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Provention of secondary heards: No special measures required: See Second Providence and Application of providence optimized See Second Providence of the Application of the Application and Internet of the Application of t	Product name: Nepsilon-Benzyloxy	carbonyl-Nalpha-Boc-L-lysine	
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(vonto, or) page oj LISA –	Reactivity No information known. Chemical stability Stable under recome Thermal decomposition / conditions to Possibility of hazardous reactions Re Conditions to avoid No further relevan Incompatible materials: Oxidizing agents	to be avoided: Decomposition will not occur if used and stored according to specifications. eacts with strong oxidizing agents	(Contd. on page 3)

10 Stability and reactivity

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Product name: Nepsilon-Benzyloxycarbonyl-Nalpha-Boc-L-	-lysine	
		(Contd. of page 2)
Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides		
11 Toxicological information		
Information on toxicological effects		
Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data		
Skin irritation or corrosion: May cause irritation		
Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known.		
Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of the	his material is available from the EPA_IARC_NTP_OSHA or ACGIH	
Reproductive toxicity: No effects known.		
Specific target organ system toxicity - repeated exposure: No effect Specific target organ system toxicity - single exposure: No effects I	known.	
Specific target organ system toxicity - single exposure: No effects I Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge th		
Additional toxicological information: To the best of our knowledge th	ne acute and chronic toxicity of this substance is not fully known.	
12 Ecological information		
Toxicity		
Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available.	le.	
Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available.		
Additional ecological information: General notes:		
Do not allow material to be released to the environment without proper Do not allow undiluted product or large quantities to reach ground water	governmental permits.	
Avoid transfer into the environment.	r, water course or sewage system.	
Results of PBT and vPvB assessment		
PBT: Not applicable. vPvB: Not applicable.		
Other adverse effects No further relevant information available.		
13 Disposal considerations		
Waste treatment methods Recommendation Consult state, local or national regulations to ensure	e proper disposal	
Uncleaned packagings: Recommendation: Disposal must be made according to official regulat		
	uuns.	
14 Transport information UN-Number		
DOT, ADN, IMDG, IATA	Not applicable	
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, IMDG, IATA	Νοι αρμισανίο	
	Not applicable	
Environmental hazards: Special precautions for user	Not applicable. Not applicable.	
Transport in bulk according to Annex II of MARPOL73/78 and the I		
Transport/Additional information:		
DOT		
Marine Pollutant (DOT):	No	
UN "Model Regulation":	-	
15 Regulatory information		
Safety, health and environmental regulations/legislation specific for	or the substance or mixture	
GHS label elements Not applicable Hazard pictograms Not applicable		
Signal word Not applicable Hazard statements Not applicable		
National regulations		
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory. All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).		
SARA Section 313 (specific toxic chemical listings) Substance is not listed. California Proposition 65		
Prop 65 - Chemicals known to cause cancer Substance is not listed.		
Prop 65 - Developmental toxicity Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed.		
Prop 65 - Developmental toxicity, male Substance is not listed.		
Information about limitation of use: For use only by technically qualit Other regulations, limitations and prohibitive regulations		
The conditions of restrictions according to Article 67 and Annex X	Regulations (EC) No. 1907/2006. Substance is not listed. VII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturi.	ng, placing on the
market and use must be observed. Substance is not listed.		-
Anney XIV of the REACH Regulations (requiring Authorisation for	use) Substance is not listed	

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

(Contd. on page 4)

(Contd. of page 3)

USA

Product name: Nepsilon-Benzyloxycarbonyl-Nalpha-Boc-L-lysine

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the use Department issuing SDS: Global Marketing Department Date of preparation / last revision 11/23/2015 / - Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) DOT: US Department of Transportation EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent PVPB: very Persistent and very Bioaccumulative ACGIH: American Conference of Governmental Industrial Hygienists (USA) OSHA: Occupational Safety and Health Administration (USA) MTP: National Toxicology Program (USA) MARC: International Agency for Research on Cancer EPA: Environmental Protection Agency (USA)