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1	Identification
	Product identifier Product name: 3-(Boc-amino)-3-(3-methoxyphenyl)propionicacid
	Stock number: L19807
	CAS Number: 284493-53-4
	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 Life MA 04825, 2000
	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) 928-0789.
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.
	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)
	Image: Alternative System         Image: Alternatinternative System
	PRE     IFlammability = 1       ReacTIVITY[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: 284493-53-4 3-(Boc-amino)-3-(3-methoxyphenyl)propionicacid
4	First-aid measures
	Description of first aid measures
	After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm.
	Seek îmmediate 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 resistant foam. 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) Hydrogen cyanide (HCN) Advice for firefighters
	Protective equipment: Wear self-contained respirator.
	Wear fully protective impervious suit.
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. Prevention of secondary hazards: No special measures required.
	Reference to other sections See Section 7 for information on safe handling
	(Contd. on page 2)

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See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

# Handling Precautions for safe handling

Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Information about protection against explosions and fires: No information known.

Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters Components with limit values that require monitoring at the workplace: Not required. Additional information: No data
Exposure controls Personal protective equipment Concrete version and burginging managuran

## General protective and hygienic measures

General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriate working environment. Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands:

Protection of nands: Impervious gloves Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Penetration time of glove material (in minutes) Not determined Eye protection: Safety glasses Body protection: Protective work clothing.

## 0 Physical and chemical properties

9 Physical and chemical properties				
Information on basic physical and che General Information Appearance: Form: Color: Odor: Odor: Odor threshold:	emical properties Solid White Not determined Not determined.			
pH-value:	Not applicable.			
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	81-83 °C (178-181 °F) Not determined Not determined			
Flash point: Flammability (solid, gaseous) Ignition temperature: Decomposition temperature: Auto igniting:	Not applicable Not determined. Not determined Not determined Not determined.			
Danger of explosion: Explosion limits: Lower: Upper: Vapor pressure: Density: Relative density Vapor density Evaporation rate Solubility in / Miscibility with Water: Partition coefficient (n-octanol/water): Viscosity: dynamic: kinematic: Other information	Product does not present an explosion hazard. Not determined Not applicable. Not determined Not determined. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not upplicable. Not upplicable. Not upplicable.			

#### 10 Stability and reactivity

Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions No dangerous reactions known Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Hazardous decomposition products: Cachen managing and action products: Carbon monoxide and carbon dioxide Nitrogen oxides

## Product name: 3-(Boc-amino)-3-(3-methoxyphenyl)propionicacid

(Contd. of page 2)

11 Oraclogical Information         11 Oraclogical Information conclusted lefters         Autor Exactly: No effects from:         11 Oraclogical Information or corresponse May cause influence         20 Min Ministers or corresponse May cause influence         20 Ministers or corresponse May cause influence         21 Ecological Information         21 Ecological Information         21 Ecological Information         22 Ecological Information         23 Minister or corresponse May cause information available.         Maximum Corresponse May cause information available.         23 Minister or corresponse May cause information available.         24 Minister or corresponse May cause information available.         25 Minister or corresponse May cause information available.         26 Minister or corresponse May cause information available.         21 Biopscal consideratindend indendul proper generation available. <th>Hydrogen cyanide</th> <th>(Contd. of page 2)</th>	Hydrogen cyanide	(Contd. of page 2)			
Toxicity Aquelic toxicity: No further relevant information available. Professional weight of the further relevant information available. Professional weight of the further relevant information available. Additional ecological information: California information: California information: Professional information: Professionel information: Professional information: Professional	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. Carcinogenicity: No effects known. Carcinogenicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known.				
Waste treatment methods           Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.           14         Transport information           Not a hizardous material for transportation.         None           UP, HMDG, IATA         None           ODT, IMDG, IATA         None           Transport negretations and relations of transportation.         None           UP, HMDG, IATA         None           Transport hazard class(es)         None           DOT, ADD, IATA         None           DOT, MDG, IATA         None           Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.           Transport Additional Information:         Not dangerous according to the above specifications.           DOT         More           Marine Pollutant (DOT):         No           15 Regulatory information         Safety, health and environmental regulations/regislation specific for the substance or mixture GHS label element	Toxicity Aquatic toxicity: No further relevant information available. 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 governmental permits. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.				
UP-Number DOT, IMDG, IATA         None           UN proper shipping name DOT, MDG, IATA         None           Transport hazard class(es)         None           DOT, ADR, IMDG, IATA         None           Class         None           Packing group         None           DOT, MDG, IATA         None           Packing group         None           DOT, MDG, IATA         None           Packing group         None           DOT, MDG, IATA         None           Special precautions for user         Not applicable.           Transport In bulk according to Annex II of MARPOLT3/78 and the IBC Code Not applicable.         Transport/Additional information:           DOT         Mot applicable.         Mot applicable.           Transport/Additional information:         Not dangerous according to the above specifications.           DOT         Mot applicable.         Mot applicable.           The pollutant (DOT):         No         Mot applicable.           Start word Not applicable         Transport Not applicable.         Mot applicable.           Start word Not applicable         Transport in bulk according to the above specifications.         DOT           Marine Pollutant (DOT):         No         Mot applicable.         Mot applicable.           Thi	Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings:				
DOT, IMDG, IATA       None         UW proper shipping name       None         Transport hazard class(es)       None         DoT, ADR, IMDG, IATA       None         Transport hazard class(es)       None         DOT, ADR, IMDG, IATA       None         Packing group       None         DOT, ADR, IMDG, IATA       None         DoT, MBG, IATA       None         Special precautions for user       Not applicable.         Transport in bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.         Transport/Additional Information:       Not dangerous according to the above specifications.         DOT       Marine Pollutant (DOT):       No         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture         Signal word Not applicable       Hazard statements Not applicable         Hazard statements Not applicable       Hazard statements Not applicable         Matord Regulations 6       for dimetrial purposes or informations for commencial purposes.         SARA Section 313 (specif	<b>14 Transport information</b> Not a hazardous material for transportation.				
Transport hazard class(es)         DOT, ADR, IMDG, IATA         Class         Packing group         DOT, MDG, IATA         None         Packing group         DOT, MDG, IATA         None         Environmental hazards:         Not applicable.         Special precautions for user         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Transport/Additional information:         Not dangerous according to the above specifications.         DOT         Marine Pollutant (DOT):         No         15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements Not applicable         Marine Pollutant (DOT):         No         15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements Not applicable         Naternents and devicopment only. This product must be used by or directly under the supervision of a technical Substance Inventory. Use of this product is restricted to research and devicopment only. This product must be used by or directly under the supervision of a technical substance by TSCA. This product must not be used for commercial purposes.         SAFA Section		None			
Transport hazard class(es)         DOT, ADR, IMDG, IATA         Class         Packing group         DOT, MDG, IATA         None         Packing group         DOT, MDG, IATA         None         Environmental hazards:         Not applicable.         Special precautions for user         Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Transport/Additional information:         Not dangerous according to the above specifications.         DOT         Marine Pollutant (DOT):         No         15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements Not applicable         Marine Pollutant (DOT):         No         15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture         GHS label elements Not applicable         Naternents and devicopment only. This product must be used by or directly under the supervision of a technical Substance Inventory. Use of this product is restricted to research and devicopment only. This product must be used by or directly under the supervision of a technical substance by TSCA. This product must not be used for commercial purposes.         SAFA Section	UN proper shipping name DOT. IMDG. IATA	None			
Packing group DOT, MIDG, IATA         None           Environmental hazards:         Not applicable.           Special precautions for user         Not applicable.           Transport in bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.         Transport in bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.           Transport in bulk according to Annex II of MARPOL7378 and the IBC Code Not applicable.         Transport/Additional information:           DOT         Marine Pollutant (DOT):         Not           Marine Pollutant (DOT):         No           15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable           Hazard pictograms Not applicable         Signal word Not applicable           Hazard statements Not applicable         Signal word Not applicable           Mation I regulations         This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.           SAFA Section 313 (specific toxic chemical Tistings) Substance is not listed.           Prop 65 - Developmental toxicity, female Substance is not listed.           Prop 65 - Developmenta	Transport hazard class(es) DOT, ADR, IMDG, IATA	None			
Environmental hazards:         Not applicable.           Special precautions for user         Not applicable.           Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Image: Code Not applicable.           Transport/Additional information:         Not dangerous according to the above specifications.           DOT         Marine Pollutant (DOT):         No           15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable         Hazard pictograms Not applicable           Signal word Not applicable         Hazard pictograms Not applicable         Hazard pictograms Not applicable           Mational regulations in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and revelopment only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must be used by or commercial purposes.           SARA Section 313 (specific toxic chemical Histings) Substance is not listed.         Prop 65 - Developmental toxicity, female Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.         Prop 65 - Developmental toxicity, male Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.         Information about limitation of use: For use only by technically qualified individuals.           Othereregulations,					
Special precautions for user         Not applicable.           Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.         Transport/Additional information:         Not dangerous according to the above specifications.           DOT         Marine Pollutant (DOT):         No           15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture           GHS label elements Not applicable         Hazard pictograms Not applicable           Hazard pictograms Not applicable         Hazard pictograms Not applicable           Hazard statements Not applicable         Not denote the use of commercial properties of the substance or mixture           This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial Justises is not listed.           Prop 65 - Chemicals known to cause cancer Substance is not listed.         Prop 65 - Developmental toxicity, male Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.         Information about limitation of use: For use only by technically qualified individuals.           Other regulations, limitations according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.           Prop 65 - Developmental toxicity, male Substance					
Transport/Additional information:       Not dangerous according to the above specifications.         DOT       Marine Pollutant (DOT):       No         15 Regulatory information       Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable       Hazard pictograms Not applicable         Hazard pictograms Not applicable       Hazard pictograms Not applicable       Hazard statements Not applicable         Hazard statements Not applicable       Hazard statements Not applicable       Hazard statements Not applicable         Mational regulations       This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.         SARA Section 313 (specific toxic chemical listings) Substance is not listed.       Prop 65 - Developmental toxicity, female Substance is not listed.         Prop 65 - Developmental toxicity, male Substance is not listed.       Prop 65 - Developmental toxicity, menale Substance is not listed.         Prop 65 - Developmental toxicity, menale Substance is not listed.       Prop 65 - Developmental toxicity, menale Substance is not listed.         Information about limitation of use: For use only by technically qualified individuals.       Other regulations, limitations and prohibitive regulations	Special precautions for user				
DOT Marine Pollutant (DOT):         No           15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable           Hazard pictograms Not applicable         Hazard pictograms Not applicable           Hazard statements Not applicable         Hazard statements Not applicable           Mational regulations         This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.           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, male Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.         Prop 65 - Developmental toxicity, male Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.         Maximust regulations           Other regulations, limitations and prohibitive regulations         Substance (EC) No. 1907/2006. Substance is not listed.           Throp 65 - Developmental toxicity, female Substance for and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Cod	e Not applicable.			
Marine Pollutant (DOT):         No           15 Regulatory information         Safety, health and environmental regulations/legislation specific for the substance or mixture           GHS label elements Not applicable         Hazard pictograms Not applicable           Hazard statements Not applicable         Hazard statements Not applicable           Hazard statements Not applicable         Hazard statements Not applicable           Mational regulations         This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.           SARA Section 313 (specific toxic chemical listings) Substance is not listed.           Prop 65 - Chemicals known to cause cancer Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.           Prop 65 - Developmental toxicity, male Substance is not listed.           Other regulations, limitations and prohibitive regulations           Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.           The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the mar	Transport/Additional information:	Not dangerous according to the above specifications.			
15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements Not applicable Hazard pictograms Not applicable Hazard statements Not applicable Mational regulations This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes. SARA Section 313 (specific toxic chemical listings) Substance is not listed. Prop 65 - Chemicals known to cause cancer Substance is not listed. Prop 65 - Developmental toxicity, female Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity, male Substance is not listed. Prop 65 - Developmental toxicity male Substance is not listed. Prop 65 - Developmental toxicity male Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulations (EC) No. 1907/2006. Substance is not listed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.	DOT Marine Pollutant (DOT):	No			

## Product name: 3-(Boc-amino)-3-(3-methoxyphenyl)propionicacid

### (Contd. of page 3)

## 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 user.

Department issuing SDS: Global Marketing Department
Date of preparation / last revision 11/24/2015 / Abbreviations and acronyms:

ID: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO: Ti: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
IMDG: International Civil Aviation of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal dose, 50 percent
VPWs very Persistent and very Bioaccumulative
ACGIH: American Chernental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
IMTe: National Toxicology Program (USA)
IATE: International Air Transport Goods (USA)
IATE: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)

USA