

SAFETY DATA SHEET

Creation Date 16-Jun-2011

Revision Date 07-Jun-2018

Revision Number 1

1. Identification

Product Name BOC-D-Aspartic acid beta-benzyl ester

Cat No. : AC442870050

CAS-No 51186-58-4
Synonyms BOC-D-Asp(OBn)-OH

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific
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

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

4. First-aid measures

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.
Most important symptoms and effects	No information available.
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Thermal decomposition can lead to release of irritating gases and vapors Carbon monoxide (CO) Carbon dioxide (CO₂) Nitrogen oxides (NO_x)

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
-	1	-	N/A

6. Accidental release measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.
Environmental Precautions	Should not be released into the environment.

Methods for Containment and Clean Up	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.
---	--

7. Handling and storage

Handling	Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.
Storage	Keep container tightly closed. Store under an inert atmosphere. Keep refrigerated.

8. Exposure controls / personal protection

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limit established by the region specific regulatory bodies.
----------------------------	--

Engineering Measures None under normal use conditions.

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 No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	102 - 105 °C / 215.6 - 221 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	C16 H21 N O6
Molecular Weight	323.35

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under recommended storage conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents, Strong acids

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Toxicologically Synergistic No information available

Products

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

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory information

International Inventories**Legend:****X - Listed****E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.****F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.****N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.****P - Indicates a commenced PMN substance****R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.****S - Indicates a substance that is identified in a proposed or final Significant New Use Rule****T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.****XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).****Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.****Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.****U.S. Federal Regulations****TSCA 12(b)** Not applicable**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): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations**Mexico - Grade** No information available**16. Other information****Prepared By** Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com**Creation Date** 16-Jun-2011**Revision Date** 07-Jun-2018**Print Date** 07-Jun-2018**Revision Summary** 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