

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Product code:

D-Alanine A0177

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) Responsible department: TCI America Environmental Health Safety and Security +1- 503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: WHMIS 2015:	Not classifiable
Signal word:	None
Hazard Statement(s):	None
Pictogram(s) or Symbol(s):	None
Precautionary Statement(s):	None
Hazards not otherwise classified: [HNOC]	None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Components:	Substance D-Alanine
Percent:	>98.0%(T)
CAS RN:	338-69-2
Molecular Weight:	89.09
Chemical Formula:	C ₃ H ₇ NO ₂
Synonyms:	D-2-Aminopropionic Acid , H-D-Ala-OH

4. FIRST-AID MEASURES				
Description of first aid measures Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical			
Skin contact:	Advice/attention if you feel unwell. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Get medical advice/attention if you feel unwell. Rinse mouth.			
Eye contact:				
Ingestion:				
Symptoms/effects:				
Acute:	No data available			
Delayed:	No data available			
Indication of any immediate medical atte	ention:			
Not available. Notes to physician:				
No data available				
5. FIRE-FIGHTING MEASURES				
Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.			
Specific hazards arising from the	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume			
chemical: Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Nitrogen oxides Closed containers may explode from heat of a fire.			
Advice for firefighters:	Wear self-contained breathing apparatus if possible.			
6. ACCIDENTAL RELEASE MEASU	RES			
Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains.			
Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected			
Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: 7. HANDLING AND STORAGE	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated.			
Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: 7. HANDLING AND STORAGE Precautions for safe handling:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing.			
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Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: 7. HANDLING AND STORAGE Precautions for safe handling: Conditions for safe storage, including a Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / PERSO	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. ny incompatibilities Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Comply with laws.			
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Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: 7. HANDLING AND STORAGE Precautions for safe handling: Conditions for safe storage, including a Storage conditions: Packaging material: 8. EXPOSURE CONTROLS / PERSO Appropriate engineering controls: Personal protective equipment Respiratory protection: Hand protection:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing. ny incompatibilities Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents. Comply with laws. DNAL PROTECTION Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath. Dust respirator. Follow local and national regulations. Protective gloves.			
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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C):	Solid		
Form:	Crystal - Powder		
Colour:	White		
Odour:	No data available		
Odor threshold:	No data available		
Odour threshold:	No data available		
Melting point/freezing point:	No data available	pH:	No data available
Boiling point/range:	No data available	Vapour pressure:	No data available.
Decomposition temperature:	No data available	Vapour density:	No data available
Relative density:	No data available	Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available		
Log Pow:	No data available	Evaporation rate(Butyl Acetate=1):	No data available
Flash point:	No data available	Autoignition temperature:	No data available
Flammability(solid, gas):	No data available	Flammability or explosive limits:	
		Lower:	No data available
		Upper:	No data available
Solubility(ies):		- F F -	
[Water]	Soluble		
[Other solvents]	No data available		
10. STABILITY AND REACT	IVITY		
Desetheiter	No. dete available		

Reactivity: Chemical stability: Possibility of hazardous reactions: Incompatible materials: Hazardous decomposition products: No data available Stable under proper conditions. No special reactivity has been reported. Oxidizing agents Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

> IARC: No data available

NTP:

No data available

OSHA: No data available

Reproductive toxicity: No data available

Target organ(s):

No data available

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12. ECOLOGICAL INFORMATION

Ecotoxicity:	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
Persistence / degradability:	No data available
Bioaccumulative potential(BCF): Mobility in soil	No data available
Log Pow:	No data available
Soil adsorption (Koc):	No data available
Henry's Law (PaM 3/mol):	No data available
13. DISPOSAL CONSIDERATIONS	
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.
Disposal of container:	Dispose of as unused product.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATION	
DOT (US)	Non-hazardous for transportation.
IATA	Non-hazardous for transportation.
IMDG	Non-hazardous for transportation.

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15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regu	lations					
CERCLA Hazardous substance and Reportable Quantity:						
SARA 313:		Not Listed				
SARA 302:		Not Listed				
State Regulations	<u>s</u>					
State Right-to-Kn	ow					
Massachuse	tts	Not Listed				
New Jersey		Not Listed				
Pennsylvania	a	Not Listed				
California Proposition 65:		Not Listed				
Other Information	<u>1</u>					
NFPA Rating:			HMIS Classification:			
Health:	0		Health:			
Flammability:	0		Flammability:			
Instability:	0		Physical:			
International Inventories						
Canada: NDSL		On NDSL				
EC-No:		206-418-1				

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.