SAFETY DATA SHEET

Creation Date 26-Mar-2010 Revision Date 24-Dec-2021 Revision Number 4

1. Identification

Product Name D-Calcium pantothenate

Cat No.: AC243300000; AC243300050; AC243301000; AC243305000

CAS No 137-08-6

Synonyms D-Pantothenic acid calcium salt

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Shanghai ZNC Biotechnology Co., Ltd. Room 617,Building 4-5, No.500 East Gaoke Road, Pudong New Area, Shanghai (201210), China 86-21-68453907 /58356660

Emergency Telephone Number 86-21-68453907 /58356660

2. Hazard(s) identification

Classification

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

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

None required

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %
N-(2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)betaal	137-08-6	>95
anine, calcium salt (2:1), (R)-		

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. Get medical attention

immediately if symptoms occur.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point 145 °C / 293 °F

Method - No information available

Autoignition Temperature

Explosion Limits

No information available

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

Carbon monoxide (CO). Carbon dioxide (CO2).

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

HealthFlammabilityInstabilityPhysical hazards011N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust

formation.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Up**

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid

contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from

moisture. Incompatible Materials. Strong oxidizing agents.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished 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.

Physical and chemical properties

Physical StateSolidAppearanceWhiteOdorOdorless

Odor Threshold No information available pH No information available 6.8-8.0 5% aq.sol

Melting Point/Range
190 °C / 374 °F
Boiling Point/Range
No information available
Flash Point
145 °C / 293 °F
Evaporation Rate
Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor Pressurenegligible

Vapor DensityNot applicableSpecific GravityNo information available

Solubility Soluble in water
Partition coefficient; n-octanol/water No data available

Autoignition Temperature No information available

Decomposition Temperature 195 °C Viscosity Not applicable

Molecular Formula C18 H32 Ca N2 O10

Molecular Weight 476.52

10. Stability and reactivity

D-Calcium pantothenate

Reactive Hazard None known, based on information available

Stability Hygroscopic.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
N-(2,4-Dihydroxy-3,3-dimethyl-1-ox	LD50 > 10 g/kg (Rat)	Not listed	Not listed
obutyl)betaalanine, calcium salt			
(2:1), (R)-			

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.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
N-(2,4-Dihydroxy-3,3-d	137-08-6	Not listed				
imethyl-1-oxobutyl)be						
taalanine, calcium						
salt (2:1), (R)-						

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

No information available. **Teratogenicity**

STOT - single exposure None known STOT - repeated exposure None known

No information available **Aspiration hazard**

Symptoms / effects,both acute and No information available

delayed

No information available **Endocrine Disruptor Information**

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

12. Ecological information

D-Calcium pantothenate

Waste Disposal Methods

Ecotoxicity

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Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

Component	log Pow
N-(2,4-Dihydroxy-3,3-dimethyl-1-oxobutyl)betaalanine, calcium salt	-5.35
(2:1), (R)-	

13. Disposal considerations

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			
DOT TDG IATA	Not regulated			
<u>IATA</u>	Not regulated			
IMDG/IMO_	Not regulated			
15. Regulatory information				

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
N-(2,4-Dihydroxy-3,3-dimethyl-1-o xobutyl)betaalanine, calcium salt (2:1), (R)-	137-08-6	Х	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
N-(2,4-Dihydroxy-3,3-dimethyl-1-o	137-08-6	Х	-	205-278-9	Х	Х	Х	Х	Х	KE-10821
xobutyl)betaalanine, calcium										
salt (2:1), (R)-										

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

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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 Slight risk, Grade 1

Authorisation/Restrictions according to EU REACH

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
N-(2,4-Dihydroxy-3,3-dimethyl -1-oxobutyl)betaalanine, calcium salt (2:1), (R)-	137-08-6	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
N-(2,4-Dihydroxy-3,3-dimethyl -1-oxobutyl)betaalanine, calcium salt (2:1), (R)-	137-08-6	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Shanghai ZNC Biotechnology Co., Ltd.

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 Creation Date
 26-Mar-2010

 Revision Date
 24-Dec-2021

 Print Date
 24-Dec-2021

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).

Revision Date 24-Dec-2021

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