

## SAFETY DATA SHEET

### D-CALCIUM PANTOTHENATE (VIT. B5)

#### PRODUCT # D-CAL-PAN-VB5-7353

#### 1. IDENTIFICATION

**Material Name:** D-Calcium Pantothenate

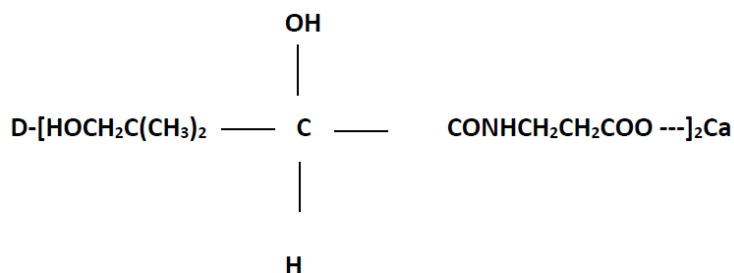
#### 2. 3. COMPOSITION & INFORMATION ON INGREDIENTS

**Popular Name:** Vitamin B5  
**Molecular Equation:**  $C_{18}H_{32}CaN_2O_{10}$   
**Molecular Weight:** 476.53 (according to 1995 international atomic weight)  
**Appearance and Character:** D-Calcium Pantothenate is a kind of white powder, odorless, tastes a little bitter. Its aqueous solution shows neutral or faintly base, it dissolves easily in water, slightly in alcohol and hardly dissolves in chloroform or ethyl ether.

#### Specification:

- Infrared absorption up to standard figure
- Identification of calcium ion normal reaction
- Specific rotation +25.00 ~ -27.50
- Alkalinity normal reaction
- Loss on drying  $\leq 5.0\%$
- Heavy metals  $\leq 0.002\%$
- Impurity  $\leq 1.0\%$
- Organic volatile impurity as required
- Nitrogen content 5.7 ~ 6.0%
- Calcium content 8.2 ~ 8.6%

#### Structural Formula:



**CAS No.:** 137-08-6

### Importers and Distributors of Compounding Products

### 3. HAZARDS IDENTIFICATION

This is expected to be a low hazard for a usual industrial handling. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

### 4. FIRST AID MEASURES

<b>Skin Contact:</b>	Wash the affected area thoroughly with soap and large amounts of water for at least 15 minutes. If inflammation develops, seek medical treatment.
<b>Eye Contact:</b>	Immediately flush the affected eye with copious quantities of water for at least 15 minutes, and seek medical treatment.
<b>Inhalation:</b>	Move from exposure to a place with fresh air. Hypersensitive reactions must receive immediate medical attention. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
<b>Swallowing:</b>	Wash the mouth thoroughly with water. If a large amount has been swallowed, drink one or two glasses of water and put fingers into the throat to induce vomiting. Hypersensitive reactions must receive immediate medical attention. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

### 5. FIREFIGHTING MEASURES

<b>Extinguishing Media:</b>	Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and material.
<b>Fire Fighting Procedures:</b>	As for all fires, evacuate personnel to safe area, remove the container to a safe place and firefighters should use self-contained breathing equipment and protective clothing and extinguish from the windward.
<b>Unusual Fire and Explosion Hazards:</b>	When heated to decomposition, the material emits toxic burned carbon dioxide, carbon monoxide, and nitrogen oxides.

### 6. ACCIDENTAL RELEASE MEASURES

Evacuate area. Using non-sparking tool to sweep up material and place in container to hold for waste disposal. Ventilate area and wash spilled site after removal.

### 7. HANDLING & STORAGE

<b>Handling:</b>	Avoid contact with skin, eyes, and clothing. Do not breathe dust or fumes.
<b>Storage:</b>	Store in an airtight container.

### 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

<b>Exposure Limit Value:</b>	
• OSHA: None listed	
• ACGD: None listed	
<b>Personal Protective Equipment:</b>	
<b>Respiratory Protection:</b>	NIOSH-approved respirator
<b>Ventilation:</b>	Mechanical exhaust required
<b>Protective Gloves:</b>	Rubber
<b>Eye Protection:</b>	Safety goggles
<b>Other Protective Clothing or Equipment:</b>	Cover skin and eyes

## 9. PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance and Odour:</b>	White powder, odorless
<b>pH:</b>	Between 7.0 and 9.0
<b>Melting Point:</b>	Unknown
<b>Decomposition Temperature:</b>	Unknown
<b>Boiling Point:</b>	Not applicable
<b>Density:</b>	Not available
<b>Flash Point:</b>	Not available
<b>Solubility:</b>	Freely soluble in water, very slightly soluble in ethanol, and practically insoluble in other

## 10. STABILITY & REACTIVITY

<b>Chemical Stability:</b>	Stable under normal temperature and pressures.
<b>Conditions to Avoid:</b>	Heat, flames, sparks, and other source of ignition.
<b>Incompatibility (Materials to Avoid):</b>	Oxidizing materials.
<b>Hazardous Decomposition By-product:</b>	When heated to decomposition, the material emits toxic fumes of carbon dioxide, carbon monoxide, and nitrogen oxides.

## 11. TOXICOLOGICAL INFORMATION

<b>Health Hazard Data:</b>	
<b>Acute Toxicity:</b>	LD <sub>10</sub> – 10 g/kg oral mouse
<b>Carcinogenicity:</b>	Not listed by ACGIH, LARC, NTP, OSHA, and NIOSH
<b>Mutagenicity:</b>	Unknown
<b>Teratogenicity:</b>	Unknown
<b>Reproductive Effects:</b>	Unknown
<b>Other:</b>	May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

## 12. ECOLOGICAL INFORMATION

Not available.

## 13. DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with all applicable government or local laws, and do not allow to drain into rivers without adequate treatment.

## 14. TRANSPORT INFORMATION

May be shipped normally as non-hazardous material.

## 15. REGULATORY INFORMATION

Pharmaceutical Affair Law (China).

## 16. OTHER INFORMATION

### Declaration:

The information on this material provided as above is accurate with the good faith belief. However, this Safety Data Sheet does not constitute a warranty of any kind, expressed or implied. It is the user's responsibility to implement policies for the safe handling and use of this product, and to determine the suitability of this information for their purpose. In the event of an adverse incident associated with this material, this Safety Data Sheet is not intended to be a substitute for consultation with medical or remediation personnel.