

MATERIAL SAFETY DATA SHEET

Vitamin D₃ 500 Feed Grade

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Effective Date: 11.25.2014	Review Date: 11.25.2016	

1.0 IDENTIFICATION OF MATERIAL:

Name of Composition	Vitamin D ₃ 500 Feed Grade; Cholecalciferol; Activated 7-Dehydrocholesterol
Chemical Family	Sterol
Molecular Formula	C ₂₇ H ₄₄ O

2.0 SIGNIFICANT COMPONENTS AND CONTAMINANTS:

VITAMIN D ₃ CONTENTS	EINECS No.*:	Molecular Weight*:
Minimum 500,000 IU/g	200-673-2	384.64

Biological activity: Each International Unit (I.U.) is equivalent to 0.025 microgram of pure Cholecalciferol. 1g contains 500,000 I.U. of Vitamin D₃

**Note: Applicable for Vitamin D₃*

3.0 PHYSICAL DATA:

Typical Characteristics	Solubility in water	Flammability
White to off-white, free-flowing powder	Water dispersible	No data

4.0 FIRE AND EXPLOSION HAZARD DATA:

FIRE EXTINGUISHING MEDIA: Water, Dry Powder, Carbon Dioxide (CO ₂) Foam
UNSUITABLE EXTINGUISHING MEDIA: No restriction.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible.
OTHER PRECAUTIONS: If safe to do so, remove the exposed containers.

5.0 HEALTH HAZARD DATA:

EFFECTS OF OVEREXPOSURE	ACUTE	
		LD50 2800-3760 mg/kg (oral, rat)
		LD50 4880-14800 mg/kg (dermal, rat)

EMERGENCY AND FIRST AID PROCEDURES: IF ON SKIN, remove/take off immediately all contaminated clothing, wash affected skin with soap and plenty of water for several minutes. Wash contaminated clothing before reuse. IF SWALLOWED by the victim, administer plenty of water and induce vomiting.

TOXICOLOGICAL INFORMATION

$\frac{100}{ATE_{mix}} = \sum \frac{C_i}{nATE_i}$	<p>Where:</p> <p>C_i = Concentration of ingredient i (%w/w or %v/v)</p> <p>i = The individual ingredient from 1 to n</p> <p>n = The number of ingredients</p> <p>ATE_i = Acute Toxicity Estimate ingredient i</p> <p>Note: Calculations of LD50 are made on the basis of Vitamin D₃ 40 MIU as 100%</p>
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6.0 REACTIVITY DATA:

GENERAL REACTIVITY:	Unreactive; decomposition to inactive products exacerbated by heat and light.
INCOMPATIBILITY (MATERIALS TO AVOID):	None.
HAZARDOUS DECOMPOSITION PRODUCTS:	None
HAZARDOUS POLYMERIZATION:	Does not polymerize.
CONDITIONS TO AVOID:	Prolonged exposure to extremes of heat and light.

7.0 SPILL PROCEDURES/DISPOSAL REQUIREMENTS:

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:	Vacuum or sweep up material and place into a suitable disposal container. Wear appropriate personal protection.
WASTE DISPOSAL METHOD:	Dispose of contents in accordance with local/regional/national/international regulations. Do not dispose to sewage systems, waterways or soil.
CONTAINER DISPOSAL:	Dispose of container in accordance with local/regional/national/international regulations. Do not dispose to sewage systems, waterways or soil.
BIOLOGICAL DEGRADATION:	No data
ECO-TOXIC EFFECT:	No data
FURTHER ECOLOGICAL DATA:	Do not allow product to enter sewage system, waterways or soil
MOBILITY IN SOIL:	No data available

8.0 SPECIAL PROTECTION INFORMATION:

EYE PROTECTION	Wear eye protection.
GLOVES	Wear protective gloves.
RESPIRATORY	Avoid breathing dust; wear disposable filter mask when handling.
VENTILATION	Use process enclosures, local exhaust ventilation or other engineering controls to avoid the exposure of product.

9.0 SPECIAL PRECAUTIONS:

HANDLING REQUIREMENTS	Keep away from ignition and heat sources. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
STORAGE REQUIREMENTS	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in an airtight, well-fitted container. Store in a cool place below 25°C.
MATERIAL OF CONSTRUCTION	Packed in 25 kg box with polyethylene liner.
LABELING	No special labeling required.

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10.0 SHIPPING REGULATIONS (D.O.T. NOMENCLATURE):

Proper Shipping Name	Generally regarded as safe (GRAS 21CFR 582.5953) - does not fall under D.O.T. regulations.
Exemptions	Exempt from D.O.T. regulations.

11.0 NOTES:

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