



# 1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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ULM-9106

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Substance  
Substance name : 1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)  
CAS-No. : 60133-18-8  
Product code : ULM-9106  
Formula : C<sub>28</sub>H<sub>44</sub>O<sub>3</sub>  
Synonyms : 1alpha,25-Dihydroxycalciferol

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 3 (Oral) H301  
Acute Tox. 3 (Dermal) H311  
Acute Tox. 2 (Inhalation:dust,mist) H330  
STOT RE 1 H372

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T+; R26  
T; R24  
T; R48/25

Full text of R-phrases: see section 16

#### GHS-US classification

Acute Tox. 3 (Oral) H301  
Acute Tox. 3 (Dermal) H311  
Acute Tox. 1 (Inhalation) H330  
STOT RE 1 H372

Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

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### 2.2. Label elements

#### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS08

Signal word (CLP) :

: Danger

Hazard statements (CLP) :

: H301+H311 - Toxic if swallowed or in contact with skin  
H330 - Fatal if inhaled  
H372 - Causes damage to organs (Skin, respiratory system/digestive system) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP) :

: P260 - Do not breathe dust, fume, gas, mist, spray, vapors.  
P264 - Wash Both hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective clothing, protective gloves.  
P284 - [In case of inadequate ventilation] wear respiratory protection.  
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P302+P352 - IF ON SKIN: Wash with plenty of water.

#### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS06

GHS08

Signal word (GHS-US) :

: Danger

Hazard statements (GHS-US) :

: H301+H311 - Toxic if swallowed or in contact with skin  
H330 - Fatal if inhaled  
H372 - Causes damage to organs (respiratory system/digestive system, Skin) through prolonged or repeated exposure (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) :

: P260 - Do not breathe dust, fume, gas, mist, spray, vapors.  
P264 - Wash Both hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective clothing, protective gloves.  
P284 - [In case of inadequate ventilation] wear respiratory protection.  
P301+P310 - If swallowed: Immediately call a poison center or doctor  
P302+P352 - If on skin: Wash with plenty of water  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P310 - Immediately call a poison center or doctor  
P312 - Call a poison center or doctor if you feel unwell  
P314 - Get medical advice/attention if you feel unwell.  
P320 - Specific treatment is urgent (see Hazard pictograms (CLP) on this label)  
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)  
P330 - Rinse mouth.  
P361 - Take off immediately all contaminated clothing.  
P363 - Wash contaminated clothing before reuse.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container to Comply with applicable regulations

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)	(CAS-No.) 60133-18-8	100	T+; R26 T; R24 T; R48/25

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)	(CAS-No.) 60133-18-8	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 1, H372

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%) (Main constituent)	(CAS-No.) 60133-18-8	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 1 (Inhalation), H330 STOT RE 1, H372

Full text of H-phrases: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
First-aid measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: Causes damage to organs (Skin, respiratory system) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed).
Symptoms/effects after inhalation	: Fatal if inhaled.
Symptoms/effects after skin contact	: Toxic if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

Firefighting instructions	: Wear self contained breathing apparatus for fire fighting if necessary.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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### 6.3. Methods and material for containment and cleaning up

For containment : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in freezer (-20°C). Protect from light.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : Wear suitable protective clothing and gloves.

Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Crystalline

Molecular mass : 428.65 g/mol

Color : White

Odor : No data available

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

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Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable if stored under recommended conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Formed under fire conditions: Carbon oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin. Inhalation:dust,mist: Fatal if inhaled.

1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%) (60133-18-8)	
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Causes damage to organs (Skin, respiratory system/digestive system) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed).
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: Fatal if inhaled.
Symptoms/effects after skin contact	: Toxic if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

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### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.
- Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
- Ecology - waste materials : Dispose of as unused product.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

- UN-No.(DOT) : 2811
- DOT NA no. UN2811

### 14.2. UN proper shipping name

- Proper Shipping Name (DOT) : Toxic solids, organic, n.o.s.
- Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
- Hazard labels (DOT) : 6.1 - Poison



- DOT Symbols : G - Identifies PSN requiring a technical name
- Packing group (DOT) : II - Medium Danger
- DOT Special Provisions (49 CFR 172.102) : IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).  
IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.  
IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.  
T3 - 2.65 178.274(d)(2) Normal..... 178.275(d)(2)  
TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 153
- DOT Packaging Non Bulk (49 CFR 173.xxx) : 212
- DOT Packaging Bulk (49 CFR 173.xxx) : 242

### 14.3. Additional information

- Other information : No supplementary information available.

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### Overland transport

Packing group (ADR) : II  
Class (ADR) : 6.1 - Toxic substances  
Hazard identification number (Kemler No.) : 60  
Classification code (ADR) : T2  
Hazard labels (ADR) : 6.1 - Toxic substances



Orange plates :



Tunnel restriction code (ADR) : D/E  
Limited quantities (ADR) : 500g  
EAC : 2X  
Excepted quantities (ADR) : E4

### Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.  
MFAG-No : 154

### Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg  
Civil Aeronautics Law : Toxic and infectious substances/Toxic substances

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%) (60133-18-8)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

### 15.2. International regulations

#### CANADA

1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%) (60133-18-8)	
Not listed on the Canadian DSL (Domestic Substances List)	

#### 15.2.1. National regulations

No additional information available

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### 15.3. US State regulations

1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)(60133-18-8)	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

### SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

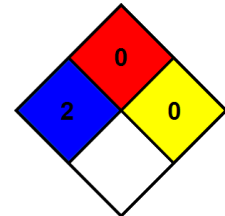
Full text of R-, H- and EUH-phrases:

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
H301	Toxic if swallowed
H311	Toxic in contact with skin
H330	Fatal if inhaled
H372	Causes damage to organs through prolonged or repeated exposure
R24	Toxic in contact with skin
R26	Very toxic by inhalation
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed
T	Toxic
T+	Very toxic

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



### Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

CIL Substance SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*