



25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 26/08/2014

Revision date:

Version: 1

DLM-9114-B

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

1.1. Product identifier

Product form : Mixtures
Product name. : 25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL
Product code : DLM-9114-B

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 : Industrial.
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 www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-202-483-7616 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 2	H225
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 3	H335

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11
Xi; R36/37/38
N; R51/53

Full text of R-phrases: see section 16

Classification (GHS-US)

Flam. Liq. 2	H225
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT SE 3	H335
Aquatic Acute 2	H401

Adverse physicochemical, human health and environmental effects

Nerves, Liver, Heart.

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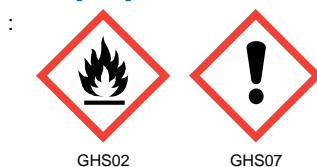
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according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

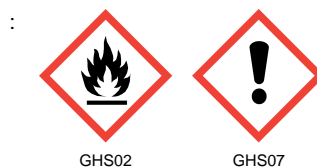
: H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
P264 - Wash Both hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective clothing, protective gloves

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H401 - Toxic to aquatic life

Precautionary statements (GHS-US)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust, gas, mist, spray, vapors, fume
P264 - Wash Both hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P321 - Specific treatment (see Hazard pictograms (CLP) on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P370+P378 - In case of fire: Use Carbon dioxide., Dry chemical., Alcohol resistant foam., Water spray for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to Comply with applicable regulations.

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2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
ETHANOL UNLABELED	(CAS No)64-17-5 (EC no)200-578-6 (EC index no)603-002-00-5	99.9937	F; R11 Xi; R36/37/38 N; R51
25-HYDROXYVITAMIN D2 (6,19,19-D3,97%)	(CAS No)1217467-39-9	0.0063	T+; R26/27/28 R48

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ETHANOL UNLABELED	(CAS No)64-17-5 (EC no)200-578-6 (EC index no)603-002-00-5	99.9937	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
25-HYDROXYVITAMIN D2 (6,19,19-D3,97%)	(CAS No)1217467-39-9	0.0063	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT SE 1, H370

Name	Product identifier	%	Classification (GHS-US)
ETHANOL UNLABELED	(CAS No)64-17-5	99.9937	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 2, H401

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Move out of dangerous area. Consult a physician and show this safety data sheet. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash with soap and plenty of water. Consult a physician. Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Rinse Immediately with plenty of water and seek medical advice. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label).
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Flush eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Rinse immediately with plenty of water. Get medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through skin. Causes skin irritation. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation. Causes serious eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.

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

No additional information available

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SECTION 5: Firefighting measures

5.1. Extinguishing media

- suitable extinguishing media : For small fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapor.
- Explosion hazard : May form flammable/explosive vapor-air mixture.
- Reactivity : Vapors may form explosive mixture with air.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray to cool unopened containers. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- 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

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain spillage, then collect with non-combustible absorbent material. Disposal should be in accordance with applicable Federal, State and local regulations.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Handle empty containers with care because residual vapors are flammable.
- Precautions for safe handling : Avoid breathing dust, mist or spray. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash Both hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical equipment.
- Storage conditions : Store in freezer (-20°C). Protect from light.
- Incompatible products : Strong bases. strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

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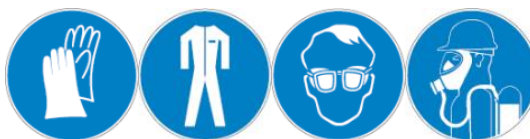
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL		
Italy - Portugal- USA ACGIH	ACGIH TWA (ppm)	1000.0000000000 ppm Upper Respiratory Tract irritation. Confirmed animal carcinogen.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1900.0000000000 mg/m ³
ETHANOL UNLABELED (64-17-5)		
Italy - Portugal- USA ACGIH	ACGIH TWA (ppm)	1000.0000000000 ppm Upper Respiratory Tract irritation. Confirmed animal carcinogen.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1900.0000000000 mg/m ³

8.2. Exposure controls

Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus. Avoid all unnecessary exposure.



Hand protection : Wear suitable protective clothing and gloves. Wear protective gloves.
Eye protection : Wear safety glasses with side shields (or goggles) and a face shield. Chemical goggles or safety glasses.
Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Handle with gloves. Wear suitable protective clothing.
Respiratory protection : When appropriate, use NIOSH/CEN approved respirator. Wear approved mask.
Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

The properties listed below are for the solvent, the main component of this mixture.

Physical state : Liquid
Appearance : Liquid, clear.
Color : Colourless.
Odor : characteristic.
Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : -114 °C (-173 °F)
Freezing point : No data available
Boiling point : 78.3 °C (172.9 °F)
Flash point : 14.0 °C (57.2 °F) - closed cup
Self ignition temperature : 363 °C (685 °F)
Decomposition temperature : No data available
Flammability (solid, gas) : Highly flammable liquid and vapor
Vapor pressure : 59.5 hPa (44.6 mmHg) at 20.0 °C (68.0 °F)
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : Water: Completely soluble
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
Explosive limits : 3.3 - 19 % (V)

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Vapors may form explosive mixture with air.

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Keep away from heat, sparks and flame. Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Alkali metals, Ammonia, Oxidizing agents, Peroxides. strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - None known. fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL	
LD50 oral rat	7060 mg/kg
LC50 inhalation rat (ppm)	20000 ppm 10 h
ATE (oral)	7060.000 mg/kg body weight

ETHANOL UNLABELED (64-17-5)	
LD50 oral rat	7060 mg/kg
LC50 inhalation rat (ppm)	20000 ppm 10 h
ATE (oral)	7060.000 mg/kg body weight

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) (1217467-39-9)	
LC50 inhalation rat (ppm)	130 - 380 ppm 4 h
ATE (oral)	5.000 mg/kg body weight
ATE (dermal)	5.000 mg/kg body weight
ATE (dust, mist)	0.050 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation. Causes skin irritation
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: May cause respiratory irritation. Inhalation - May cause respiratory irritation. May cause respiratory irritation
Specific target organ toxicity (repeated exposure)	: Not classified No data available Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May be harmful if inhaled. Causes respiratory tract irritation. May cause respiratory irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through skin. Causes skin irritation. Causes skin irritation.

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL DLM-9114-B

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Symptoms/injuries after eye contact : Causes eye irritation. Causes serious eye irritation.
Symptoms/injuries after ingestion : May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

LC50 fish 1	13000.00 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	9.30 mg/l Daphnia magna (Water flea) - 48 h

ETHANOL UNLABELED (64-17-5)

LC50 fish 1	13000.00 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	9.30 mg/l Daphnia magna (Water flea) - 48 h

12.2. Persistence and degradability

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

Persistence and degradability	Not available.
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ETHANOL UNLABELED (64-17-5)

Persistence and degradability	Not available.
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25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) (1217467-39-9)

Persistence and degradability	Not available.
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12.3. Bioaccumulative potential

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

Bioaccumulative potential	Not available. Not established.
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ETHANOL UNLABELED (64-17-5)

Bioaccumulative potential	Not available.
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25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) (1217467-39-9)

Bioaccumulative potential	Not available.
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12.4. Mobility in soil

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

Ecology - soil	Not available.
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ETHANOL UNLABELED (64-17-5)

Ecology - soil	Not available.
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25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) (1217467-39-9)

Ecology - soil	Not available.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : Not available.
Other information : Avoid release to the environment.

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.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to ...

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

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SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

UN-No.(DOT) : 1170
DOT NA no. : UN1170

14.2. UN proper shipping name

DOT Proper Shipping Name : Ethanol solutions
Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger
DOT Special Provisions (49 CFR 172.102) : 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx) : 4b;150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
Marine pollutant : No

14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II
Class (ADR) : 3 - Flammable liquid
Hazard identification number (Kemler No.) : 33
Classification code (ADR) : F1
Danger labels (ADR) : 3 - Flammable liquids



Orange plates : An orange rectangular plate with a black border. The number '33' is printed in black in the upper half, and the number '1170' is printed in black in the lower half.

Tunnel restriction code : D/E
Limited quantities (ADR) : 1L
EAC : •2YE
Excepted quantities (ADR) : E2

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
MFAg-No : 127

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Air transport

DOT Quantity Limitations Passenger aircraft/rail : 5 L
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L
CFR 175.75)

Civil Aeronautics Law : Flammable liquids

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

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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ETHANOL UNLABELED (64-17-5)

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
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15.2. International regulations

CANADA

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.2.1. National regulations

No additional information available

15.3. US State regulations

25-HYDROXYVITAMIN D2 (6,19,19-D3,97%) 50 UG/ML IN ETHANOL()

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
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ETHANOL UNLABELED (64-17-5)

U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - New Jersey - Right to Know Hazardous Substance List
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

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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. None.

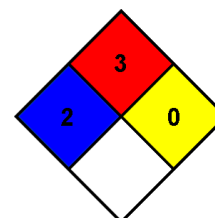
Full text of R-, H- and EUH-phrases::

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H300	Fatal if swallowed
H310	Fatal in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H370	Causes damage to organs
R11	Highly flammable
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R48	Danger of serious damage to health by prolonged exposure
R51	Toxic to aquatic organisms
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
F	Highly flammable
N	Dangerous for the environment
T+	Very toxic
Xi	Irritant

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

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

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

CIL Mixture 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