

# 1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 **UG/ML IN ETHANOL (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 Date of issue: 18/08/2021 Revision date: Version: 1.0 ULM-9106-C

SECTION 1: Identification of the sul	bstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixtures
Product name	: 1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)
Product code	: ULM-9106-C
1.2. Relevant identified uses of the sub	stance 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	
<u>cilsales@isotope.com</u> www.isotope.com	
Emergency telephone number	
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hours)	
International: 1-703-741-5970 (24 hours)	
<b>SECTION 2: Hazards identification</b>	
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 hazard classes and H-statements : see section 16

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

F; R11 Xi; R36/37/38 Full text of R-phrases: see section 16

## **GHS-US** classification

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

Full text of H statements : see section 16

## Adverse physicochemical, human health and environmental effects

Nerves. heart. liver. Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

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2.2. Label elements	
Labeling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS02 GHS07
Signal word (CLP)	: Danger
Hazardous ingredients	: ETHANOL UNLABELED
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 hands, forearms and face thoroughly after handling.
	P271 - Use only outdoors or in a well-ventilated area.
	P280 - Wear protective clothing, protective gloves.
CHS US Jaboling	
GHS-US labeling	
Hazard pictograms (GHS-US)	
	GHS02 GHS07
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H225 - Highly flammable liquid and vapor
	H315 - Causes skin irritation H319 - Causes serious eve irritation
	H335 - May cause respiratory irritation
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, fume, gas, mist, spray, vapors.
	P261 - Avoid breatining dust, runne, gas, mist, spray, vapois. P264 - Wash hands, forearms and face thoroughly after handling.
	P271 - Use only outdoors or in a well-ventilated area.
	P280 - Wear protective clothing, protective gloves. P302+P352 - If on skin: Wash with plenty of water
	P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse
	skin with water/shower P304+P340 - If inhaled: Remove person to fresh air and keep 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 doctor if you feel unwell P321 - Specific treatment (see Hazardous component(s) for labeling on this label)
	P332+P313 - If skin irritation occurs: Get medical advice/attention.
	P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.
	P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry
	extinguishing powder to extinguish.
	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 hazardous or special waste collection point, in

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

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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 (REACH-no) 01-2119457610-43	99.987	F; R11 Xi; R36/37/38
1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)	(CAS-No.) 60133-18-8	0.013	T+; R26 T; R24 T; R48/25
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 (REACH-no) 01-2119457610-43	99.987	Flam . Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)	(CAS-No.) 60133-18-8	0.013	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 1, H372
Name	Product identifier	%	GHS-US classification
ETHANOL UNLABELED	(CAS-No.) 64-17-5	99.987	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%)	(CAS-No.) 60133-18-8	0.013	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 1 (Inhalation), H330 STOT RE 1, H372

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: 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: Gently wash with plenty of soap and water, Get immediate medical advice/attention. 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.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.
4.2. Most important symptoms and effect	ts, both acute and delayed
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be harmful 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	: Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

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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	: Highly flammable liquid and vapor.	
5.3. Advice for firefighters		
Firefighting instructions	<ul> <li>Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul>	
Protection during firefighting	<ul> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> <li>Wear recommended personal protective equipment.</li> </ul>	
SECTION 6: Accidental release me	easures	
6.1. Personal precautions, protective	equipment and emergency procedures	
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.	
6.1.1. For non-emergency personnel		
Emergency procedures	: Use personal protective equipment as required. Avoid breathing vapors, mist, gas. Ensure adequate air ventilation. No flames, no sparks. Eliminate all sources of ignition. Evacuate unnecessary personnel. Special attention should be given to low areas/pits where flammable vapors can accumulate.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Prevent entry to sewers and public waters. Do	o not allow to enter drains or water courses. Avoid release to the environment.	
6.3. Methods and material for contain	ment and cleaning up	
For containment	: Collect spillage. Clean up any spills as soon as possible, using an absorbent material to collect it. Vacuum with an equipment that avoids ignition risk. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.	
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.	
Other information	: Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		
For further information refer to section 13.		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable.	
Precautions for safe handling	<ul> <li>No open flames. No smoking. Use only non-sparking tools. Avoid breathing dust, fume, gas, mist, spray, vapors. Use only outdoors or in a well-ventilated area.</li> </ul>	
Hygiene measures	: Wash hands, forearms and face 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 Lighting equipment, ventilating equipment.	
Storage conditions	: Store in freezer (-20°C). Protect from light.	
Incompatible materials	: Heat sources.	
7.3. Specific end use(s)		
No additional information available		
SECTION 8: Exposure controls/pe	rsonal protection	
one rent of Exposure controls/pc		

8.1. Control parameters		
1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	1000.00000000 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	1000 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m <sup>3</sup>

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1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)			
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm	
USA NIOSH	Remark (NIOSH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.	
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m <sup>3</sup>	
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	
USA OSHA	Remark (OSHA) Upper Respiratory Tract irritation. Confirmed a carcinogen with unknown relevance to human value in mg/m3 is approximate.		
ETHANOL UNLABELED (64-17-5)			
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	1000.00000000 ppm	
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	1000 ppm	
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m <sup>3</sup>	
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm	
USA NIOSH	Remark (NIOSH)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans.	
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m <sup>3</sup>	
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	
USA OSHA	Remark (OSHA)	Upper Respiratory Tract irritation. Confirmed animal carcinogen with unknown relevance to humans. The value in mg/m3 is approximate.	

1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)			
DNEL/DMEL (Workers)			
Acute - systemic effects, inhalation	1900 mg/m <sup>3</sup>		
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	950 mg/m³		
DNEL/DMEL (additional information)			
Additional information	DNEL - Workers - Ingestion - Long-term systemic effects - 343 mg/kg BW/d		
PNEC (Water)			
PNEC aqua (freshwater)	0.96 mg/l		
PNEC aqua (marine water)	0.79 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	3.6 mg/kg dwt		
PNEC (Soil)			
PNEC soil	0.63 mg/kg dwt		
PNEC (STP)	PNEC (STP)		
PNEC sewage treatment plant	580 mg/l		
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.

: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.

Personal protective equipment

- Materials for protective clothing Hand protection Eye protection Skin and body protection Respiratory protection Environmental exposure controls
- : Wear suitable protective clothing and gloves.
- : Wear suitable protective clothing and gloves.
- : Wear eye protection. Chemical goggles or face shield with safety glasses.
- : Wear suitable protective clothing.
- : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.
- : Avoid release to the environment.

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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		
Molecular mass	: 46.07 g/mol		
Color	: Colorless		
Odor	: No data available		
Odor threshold	: No data available		
рН	: 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 °C (172 °F)		
Flash point	: 14 °C (57.2 °F) - closed cup		
Auto-ignition temperature	: 363 °C (685.4 °F)		
Decomposition temperature	: No data available		
Flammability (solid, gas)	: Highly flammable liquid and vapor		
Vapor pressure	: 59.5 hPa (44.6 mmHg) at 20 °C (68 °F)		
Relative vapor density at 20 °C	: No data available		
Relative density	: No data available		
Specific gravity / density	: 0.789 g/ml at 25 °C (77 °F)		
Solubility	: Water: completely soluble		
Log Pow	: -0.349 at 24 °C (75 °F)		
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	: 3.3 - 19 %		
9.2. Other information			
No additional information available			
SECTION 10: Stability and reactivity			
10.1. Reactivity			
Highly flammable liquid and vapor.			
10.2. Chemical stability			
See storage and expiration date on CoA			

See storage and expiration date on CoA.

10.3.Possibility of hazardous reactionsMay form flammable/explosive vapor-air mixture.

10.4. Conditions to avoid

Heat. Open flame. Direct sunlight. Sparks.

10.5. Incompatible materials

Alkali metals. ammonia. Peroxides. Oxidizing agent.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information			
11.1. Information on toxicological effects			
Acute toxicity :	Not classified		
1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)			
LD50 oral rat	10470 mg/kg		
LD50 dermal rat	15800 mg/kg		
LC50 inhalation rat (mg/l)	30000 mg/l		

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1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)		
ATE CLP (oral)		10470.000 mg/kg body weight
ATE CLP (dermal)		15800.000 mg/kg body weight
ATE CLP (vapors)		30000.000 mg/l/4h
ATE CLP (dust, mist)		30000.000 mg/l/4h
ETHANOL UNLABELED (64-17-5)		
LD50 oral rat		10470 mg/kg
LD50 dermal rat		15800 mg/kg
LC50 inhalation rat (mg/l)		30000 mg/l
ATE CLP (oral)		10470.000 mg/kg body weight
ATE CLP (dermal)		15800.000 mg/kg body weight
ATE CLP (vapors)		30000.000 mg/l/4h
ATE CLP (dust, mist)		30000.000 mg/l/4h
1,25-DIHYDROXYVITAMIN D2 UNLABELED	(C⊦	IEM. 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	:	Causes skin irritation.
		Skin – Rabbit - No skin irritation(OECD 404 method)
Serious eye damage/irritation	:	Causes serious eye irritation.
		Eyes – Rabbit - Moderate eye irritation(OECD 404 method)
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Carcinogenicity - Mouse - Oral Tumorigenic: Equivical tumorigenic agent by RTECS criteria. Liver: Tumors. Blood: Lymphomas including Hodgkin's disease.
Reproductive toxicity	:	Reproductive toxicity - Human - female - Oral Effects on Newborn: Apgar score (human only). Effects on Newborn: Other neonatal measures or effects. Effects on Newborn: Drug dependence.
Specific target organ toxicity – single exposure	:	May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Potential Adverse human health effects and symptoms	:	CNS depression. Narcosis. Damage to heart. 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. Stomach - Irregularities - Based on Human Evidence.
Symptoms/effects after inhalation	:	May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	:	Causes skin irritation.
Symptoms/effects after eye contact	:	Causes serious eye irritation.
Symptoms/effects after ingestion		May be harmful 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.		
1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)			
LC50 fish 1	14200 mg/l Pimephales promelas (fathead minnow) - 96 h		
EC50 Daphnia 1	5012 mg/l Ceriodaphnia dubia (water flea) - 48 h		
EC50 other aquatic organisms 1	275 mg/l Chlorella vulgaris (Fresh water algae) - 72 h (OECD Test Guideline 201)		
NOEC (acute)	9.6 mg/l Daphnia magna (Water flea) - 9 d		
ETHANOL UNLABELED (64-17-5)			
LC50 fish 1	14200 mg/l Pimephales promelas (fathead minnow) - 96 h		
EC50 Daphnia 1	5012 mg/l Ceriodaphnia dubia (Water flea) - 48 h		
EC50 other aquatic organisms 1	275 mg/l Chlorella vulgaris (Fresh water algae) - 72 h (OECD method 201)		

9.6 mg/I Daphnia magna (Water flea) - 9 d

NOEC (acute)

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12.2. Persistence and degradability	
ETHANOL UNLABELED (64-17-5)	
Persistence and degradability	Readily biodegradable.
BOD (% of ThOD)	95 % ThOD
12.3. Bioaccumulative potential	
1,25-DIHYDROXYVITAMIN D2 UNLABELED	00 UG/ML IN ETHANOL (CHEM. PURITY 95%)
Log Pow	-0.349 at 24 °C (75 °F)
Bioaccumulative potential	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
ETHANOL UNLABELED (64-17-5)	
Log Pow	-0.349 at 24 °C (75 °F)
Bioaccumulative potential	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	t
ETHANOL UNLABELED (64-17-5)	
PBT: not yet assessed	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	s
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local
Noglonial logislation (waste)	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.
Additional information	: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials	: Dispose of as unused product.
SECTION 14: Transport information	
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / AI	DN
In accordance with ADR / RID / IMDG / IATA / AI 14.1. UN number	
In accordance with ADR / RID / IMDG / IATA / AI 14.1. UN number UN-No.(DOT)	: 1170
In accordance with ADR / RID / IMDG / IATA / AI 14.1. UN number UN-No.(DOT) DOT NA no.	
In accordance with ADR / RID / IMDG / IATA / AI 14.1. UN number UN-No.(DOT) DOT NA no. 14.2. UN proper shipping name	: 1170 UN1170
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT)	: 1170 UN1170 : Ethanol
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT) Class (DOT)	<ul> <li>1170 UN1170</li> <li>Ethanol</li> <li>3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</li> </ul>
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT)	: 1170 UN1170 : Ethanol
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT) Class (DOT)	<ul> <li>1170 UN1170</li> <li>Ethanol</li> <li>3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</li> </ul>
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT) Class (DOT)	<ul> <li>: 1170 UN1170</li> <li>: Ethanol</li> <li>: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</li> <li>: 3 - Flammable liquid</li> </ul>
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT)	<ul> <li>: 1170 UN1170</li> <li>: Ethanol</li> <li>: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</li> <li>: 3 - Flammable liquid</li> <li>i II - Medium Danger</li> <li>: 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 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 II. Bl2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31H21). 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</li></ul>
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Special Provisions (49 CFR 172.102)	<ul> <li>1170 UN1170</li> <li>Ethanol</li> <li>3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</li> <li>3 - Flammable liquid</li> <li>3 - Flammable liquid</li> <li>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 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 II. B2 - 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</li></ul>
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Special Provisions (49 CFR 172.102) DOT Packaging Exceptions (49 CFR 173.xxx)	<ul> <li>1170 UN1170</li> <li>Ethanol</li> <li>3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</li> <li>3 - Flammable liquid</li> <li>i 1 - Medium Danger</li> <li>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 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.</li> <li>IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31H21). 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</li></ul>
In accordance with ADR / RID / IMDG / IATA / AI <b>14.1. UN number</b> UN-No.(DOT) DOT NA no. <b>14.2. UN proper shipping name</b> Proper Shipping Name (DOT) Class (DOT) Hazard labels (DOT) Packing group (DOT) DOT Special Provisions (49 CFR 172.102)	<ul> <li>1170 UN1170</li> <li>Ethanol</li> <li>3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</li> <li>3 - Flammable liquid</li> <li>3 - Flammable liquid</li> <li>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 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 II. B2 - 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</li></ul>

(CHEM. PURITY 95%) ULM-9106-C

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

14.3. Additional information	
Emergency Response Guide (ERG) Number	: 127
Other information	: No supplementary information available.
Overland transport	
Packing group (ADR)	: 1
Class (ADR)	: 3 - Flammable liquid
Hazard identification number (Kemler No.)	: 33
Classification code (ADR)	: F1
Hazard labels (ADR)	: 3 - Flammable liquids
	3
Orange plates	33 1170
Tunnel restriction code (ADR)	: D/E
Limited quantities (ADR)	11
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
Air transport	
DOT Quantity Limitations Passenger aircraft/rail	: 5L
(49 CFR 173.27) DOT Quantity Limitations Cargo aircraft only (49	. 60
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	K II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
	00 UG/ML IN ETHANOL (CHEM. PURITY 95%)
SARA Section 302 Threshold Planning	Not subject to reporting requirements of the United States SARA Section 302.
Quantity (TPQ)	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
ETHANOL UNLABELED (64-17-5)	
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	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

SARA Section 313 - Emission Reporting

Not subject to reporting requirements of the United States SARA Section 313

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## 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

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 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)		
Listed on the Canadian DSL (Domestic Substances List)		
<b>15.2.1.</b> National regulations No additional information available		
15.3. US State regulations		
1,25-DIHYDROXYVITAMIN D2 UNLABELED 100 UG/ML IN ETHANOL (CHEM. PURITY 95%)()		
U.S California - Proposition 65 - Carcinogens List	t No	
U.S California - Proposition 65 - Developmental No		

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 Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List

ETHANOL UNLABELED	(64-17-5)			
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
		Female	Male	
No	No	No	No	
1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%) (60133-18-8)				
1,25-DIHYDROXYVITAMIN	N D2 UNLABELED (CHEM. P	URITY 95%) (60133-18-8)		
<b>1,25-DIHYDROXYVITAMIN</b> U.S California -	<b>D2 UNLABELED (CHEM. P</b> U.S California -	URITY 95%) (60133-18-8) U.S California -	U.S California -	No significant risk level
		,,,,,,	U.S California - Proposition 65 -	No significant risk level (NSRL)
U.S California -	U.S California -	U.S California -		0
U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	Proposition 65 -	0

## ETHANOL UNLABELED (64-17-5)

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

## 1,25-DIHYDROXYVITAMIN D2 UNLABELED (CHEM. PURITY 95%) (60133-18-8)

### 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
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

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STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H372	Causes damage to organs through prolonged or repeated exposure
R11	Highly flammable
R24	Toxic in contact with skin
R26	Very toxic by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin
R48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed
F	Highly flammable
Т	Toxic
T+	Very toxic
Xi	Irritant

NFΡΔ	health	hazard
INFFA	neaitn	nazaru

NFPA fire hazard

NFPA reactivity

### Hazard Rating

Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 3 Serious Hazard
Physical	: 0 Minimal Hazard

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### **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

: 2 - Materials that, under emergency conditions, can cause

: 3 - Liquids and solids (including finely divided suspended

0 - Material that in themselves are normally stable, even

solids) that can be ignited under almost all ambient

temporary incapacitation or residual injury.

temperature conditions.

under fire conditions.

0