Section 1: Chemical Product and Company Identification

Cat#: 25203
Part Name: 25-DIHYDROXYVITAMIN-D3; ETHANOL SOLN. (1 ML)
Supplier: Polysciences, Inc.
400 Valley Road
Warrington, PA 18976 USA
MSDS Telephone #215-343-6484 Emergency only #215-378-4526

Identified uses: Laboratory use, manufacture of substances

Section 2: Hazards Identification

Hazard Overview
Causes skin, eye and respiratory tract irritation.
Flammable liquid and vapor.
Highly toxic if absorbed through skin.
Highly toxic if inhaled.
Highly toxic if swallowed.
May be fatal if absorbed through skin.
May be fatal if inhaled.
May be fatal if swallowed.
May cause target organ or system damage - ovaries.
May cause target organ or system damage - testicles.

GHS Classification
Acute Toxicity Inhalation Category 1
Acute Toxicity Inhalation Category 4
Acute Toxicity Oral Category 1
Acute Toxicity Oral Category 2
Flammable Liquids Category 3
Skin Corrosion Category 1A
Skin Corrosion Category 1B
Specific Target Organ Toxicity - Repeated or Prolonged Exposure Category 3

Signal word: Danger
Section 3: Composition/ Information on Ingredients

Note: Items listed with a CASRN... number have no CAS# available.

<table>
<thead>
<tr>
<th>Item#</th>
<th>Name</th>
<th>EINECS</th>
<th>CAS#</th>
<th>% in product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1alpha, 25-Dihydroxyvitamin D2</td>
<td>Unknown</td>
<td>0060133188</td>
<td>0 - 5</td>
</tr>
<tr>
<td>2</td>
<td>Ethyl alcohol</td>
<td>200-578-6</td>
<td>0000064175</td>
<td>91 - 100</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Contact medical personnel if discomfort persists.
Flush eyes with flowing water for at least 15 minutes.
If breathing is difficult, contact emergency personnel.
If swallowed, induce vomiting as directed by medical personnel.
If swallowed, wash out mouth with water if person is conscious.
Remove to fresh air.
Wash skin with deluge of water for at least 15 minutes.

Section 5: Fire Fighting Measures

Flash point, deg F.: 57 Method: TCC
UEL: 19.0 LEL: 3.3 Autoignition temperature, deg. F.: no data
Flammability Classification: IB Flame Propagation Rate: no data
Hazardous Combustion Products: none

Section 6: Accidental Release Measures

Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel.

Absorb liquids on absorbent material.
Contain spilled liquids.
Remove ignition sources.
Ventilate the area.

Section 7: Handling and Storage

Keep away from light.
Store at -20 deg. C.
Store in a tightly closed container.

Section 8: Exposure Controls/ Personal Protection

H312 Harmful in contact with skin.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P280A Wear protective gloves.
P285 In case of inadequate ventilation wear respiratory protection.
P301A IF SWALLOWED do not induce vomiting. Do not give anything to drink. Obtain medical attention without delay.
P301D IF SWALLOWED, induce vomiting as directed by medical personnel.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P314 Get medical advice/attention if you feel unwell.
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P351 Rinse cautiously with water for several minutes.

NFPA Rating

Hazard Ratings:
These ratings are Polysciences’ Inc. own assessments of the properties of the material using the ANSI/NFPA 704 Standard. Additional information can be found by consulting in the NFPA published ratings lists (List 325 and List 49).

If no data is listed the information is not available.

Health Flammability Reactivity
2 2 0

If no data is listed the information is not available.

Section 3: Composition/ Information on Ingredients

Note: Items listed with a CASRN... number have no CAS# available.

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</tr>
</tbody>
</table>
The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves.

Use chemical splash goggles and face shield.
Use latex or equivalent gloves.
Use process enclosures, local exhaust ventilation, or other engineering controls.

Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product. Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product. Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

**Section 9: Physical and Chemical Properties**

Formula: mixture  
Formula Weight: nap  
boiling point: 173  
Specific gravity: 0.7906  
melting point: -173  
Specific density: 1.6  
solubility: 100%  
appearance: clear colorless liquid

**Section 10: Stability and Reactivity**

Chemical Stability: stable  
Conditions to Avoid: heat; ignition sources  
Incompatibility with other materials: no data  
Hazardous Decomposition Products: none  
Hazardous Polymerization: will not occur

**Section 11: Toxicological Information**

Acute Data: no data  
Subchronic data: no data

**Section 12: Ecological Information**

no data

**Section 13: Disposal Considerations**

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.! If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Waste Code</th>
<th>Regulated Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000064175</td>
<td>not listed</td>
<td>not listed</td>
</tr>
<tr>
<td>0060133188</td>
<td>not listed</td>
<td>not listed</td>
</tr>
</tbody>
</table>

**Section 14: Transportation Data**

Proper Shipping Name: TOXIC LIQUIDS, FLAMMABLE, ORGANIC, N.O.S.; INHALATION HAZARD, PACKAGING GROUP I,  
Chemical Name: ETHANOLDIHYDROXYVITAMIN D3  
UN: UN2929  
Class: 6.1  
PG: II
### Section 15: Regulatory Information

All components of this product are on the TSCA public inventory.

All components of this product are on the TSCA public inventory.

Prop 65 - Column A identifies those items which are known to the State of California to cause cancer. Column B identified items which are known to the State of California to cause reproductive toxicity.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000064175</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>0060133188</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

State Regulatory Information: If a CAS# is listed below this material is subject to the listed state right-to-know requirements.

<table>
<thead>
<tr>
<th>CAS#</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0000064175</td>
<td>not listed</td>
</tr>
<tr>
<td>0060133188</td>
<td>not listed</td>
</tr>
</tbody>
</table>

SARA Toxic Release Chemicals (as defined in Section 313 of SARA Title III)

This list identifies the toxic chemicals, including their de minimis concentrations for which reporting is required under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). The list is also referred to as the Toxics Release Inventory (TRI) List.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Regulated name</th>
<th>de minimis conc. %</th>
<th>Rep. Thres.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000064175</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
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<td>not listed</td>
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</tbody>
</table>

SARA Extremely Hazardous Substances and TPQs

This list includes hazardous chemicals as defined in 29 CFR 1910.1200(c); and extremely hazardous substances regulated under Section 302 of SARA Title III with their TPQs (in pounds), as listed in 40 CFR 355, Appendices A and B.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Regulated name</th>
<th>TPQ (pounds)</th>
<th>EHS-RQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000064175</td>
<td>not listed</td>
<td>not listed</td>
<td>not listed</td>
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<td>0060133188</td>
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</tbody>
</table>

CERCLA

The hazardous substances, and their reportable quantities (RQs) are listed in the federal regulations at 40 CFR Part 302, Table 302.4. Release of a CERCLA hazardous substance in an amount equal to or greater than its RQ, in any 24-hour period, must be reported to the National Response Center at (800) 424-8802.

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Regulated name</th>
<th>RQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000064175</td>
<td>Not listed</td>
<td>Not listed</td>
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### Section 16: Other Information

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END OF MSDS