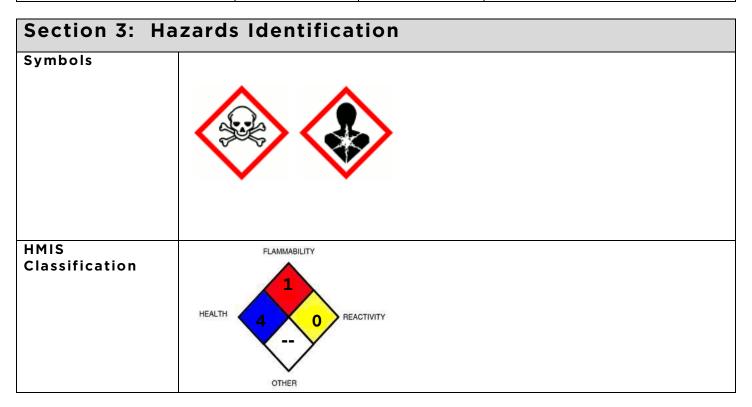


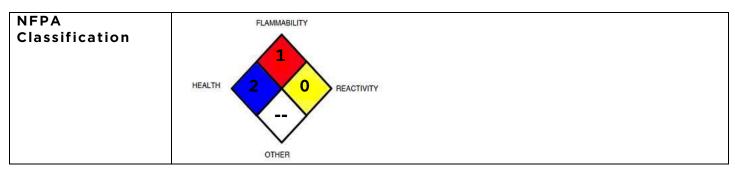
Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	Calcitriol	
Product #:	C-1026	
Synonyms:	1α,25-Dihydroxyvitamin D ₃ ; 1α,25- Dihydroxycholecalciferol	
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925	
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585	

Section 2: Composition / Information on Ingredients			
Component	CAS#	EC#	% Composition
Calcitriol	32222-06-3	250-963-8	>99







Section 4: First Aid Measures		
General	Consult a physician. Show this safety data sheet to the doctor in attendance.	
Overview:	Move out of dangerous area.	
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.	
Skin:	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.	
Eyes:	Flush eyes with water as a precaution.	
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.	
	See section 11 for more detailed information on health effects & symptoms.	

SECTION 5:	Fire Fighting Measures
Flammability of	No data available
the product:	
Extinguishing	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Media:	
Hazardous	Carbon oxides
thermal	
(de)composition	
products:	
Special Fire	Wear self-contained breathing apparatus for firefighting if necessary.
Fighting	
Procedures:	
Flash Point:	No data available

Section 6: Accidental Release Measures		
Personal Precautions:	Wear respiratory protection. Avoid dust formation. Avoid breathing vapors,	
Precautions:	mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.	
Environmental	Prevent further leakage or spillage if safe to do so. Do not let product enter	
Precautions:	drains.	



Methods for	Pick up and arrange disposal without creating dust. Sweep up and shovel.
Clean-up:	Keep in suitable, closed containers for disposal.

SECTION 7:	Handling & Storage
Storage:	Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C
Handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:



Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Skin and Body:





Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.



	Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.	
Eyes:	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).	
Ventilation/Engineering	Avoid contact with skin, eyes, and clothing. Wash hands before	
Measures:	breaks and immediately after handling the product.	
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.	
Other:	Contains no substances with occupational exposure limit values.	

SECTION 9: Physical and Chemical Properties		
Appearance &	Colorless lyophilized solid	
Odor:		
Formula	$C_{27}H_{44}O_3$	
Molecular Wt.	416.64	
Melting Pt.	No data available	
Boiling Pt.	No data available	
Density:	No data available	
Vapor Pressure:	No data available	
Evaporation Rate:	No data available	
Vapor Density:	No data available	
Solubility:	DMSO, Ethanol	
Flash Point:	No data available	
Autoignition	No data available	
Temp:		

SECTION 10: Stability and Reactivity		
Stability:	Stable under recommended storage conditions.	
Hazardous	Carbon oxides	
decomposition		
products:		
Materials to Avoid:	Strong oxidizing agents, Acid chlorides, Acid anhydrides	
Conditions to avoid:	Air, light, and moisture sensitive.	



SECTION 11: Toxicological Information		
RTECS#:	FZ4645000	
ACUTE Toxicity:	LD50 Oral = 0.62 mg/kg (rat)	
CHRONIC Toxicity:	Specific organ toxicity: Causes damage to organs through prolonged or repeated exposure.	
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC. AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA. EPA: No classification on carcinogenic data is available from EPA	

SECTION 12: Ecological Information		
Ecotoxicity:	No data available	
Mobility:	No data available	
Persistence and degradability:	No data available	
Bioaccumulative potential:	No data available	
Other adverse effects:	No data available	
Corrosivity Characteristic:	No data available	
General Notes:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.	

SECTION 13: Disposal Considerations		
Residue Waste or Unused product:	Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.	
Contaminated Packaging:	Dispose of as unused product.	



SECTION 14: Transportation Information		
UN ID#:	2811	
ADR / RID (LAND):	N/A	
DOT regulations:	UN number: 2811 Class: 6.1 Packing group: I	
	Proper shipping name: Toxic solids, organic, n.o.s. (Calcitriol)	
	Poison Inhalation Hazard: No	
IMDG/IMO (SEA):	UN number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A	
	Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Calcitriol)	
IATA/DGR (AIR):	UN number: 2811 Class: 6.1 Packing group: I	
	Proper shipping name: Toxic solid, organic, n.o.s. (Calcitriol)	
Special Provisions:	N/A	

SECTION 15:	Regulatory Information
Health Phrases:	H300 + H310 + H330 Fatal if swallowed, in contact with skin or if inhaled. H372 Causes damage to organs through prolonged or repeated exposure.
Risk Phrases:	P260 Do not breathe dust/fume/gas/mist/vapors/spray. P262 Do not get in eyes, on skin, or on clothing.
	P264 Wash skin 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 gloves/ protective clothing.
	P284 Wear respiratory protection.
Safety Phrases:	P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER /doctor. Rinse mouth. P302 + P350 + P310 IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. P314 Get medical advice/ attention if you feel unwell. P362 Take off contaminated clothing and wash before reuse. P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.
EU Regulations:	N/A
US Regulations:	TSCA: Not listed California Proposition 65: No products were found Pennsylvania State Right to Know: Listed
U.S. Federal	SARA 302/304 emergency planning and notification: No products were
Regulations:	found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard, Chronic Health Hazard SARA 313 toxic chemicals notification and release reporting: No products were found.



found. OSHA: Acute toxicity, oral (Cat. 1); Acute toxicity, inhalation (Cat. 2); Acute toxicity, dermal (Cat. 2); Specific target organ toxicity - repeated exposure (Cat. 1)
were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were
found. Clean Air Act (CAA) 112 regulated flammable substances: No products
Clean Air Act (CAA) 112 accidental release prevention: No products were
Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

SECTION 16: Other Information

LIABILITY STATEMENT: The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.