

Safety Data Sheet


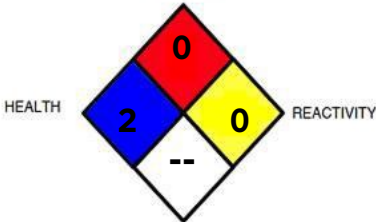
Section 1: Product & Company Identification

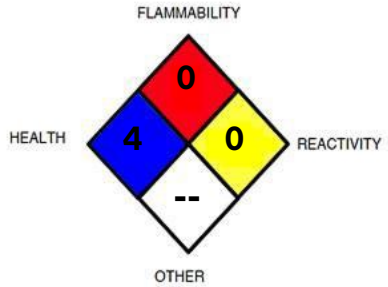
Product Name:	Digitonin
Product #:	D-2425
Synonyms:	(2.alpha.,3.beta.,5.alpha.,15.beta.,25R)-2,15-dihydroxyspirostan-3-ylo-.beta.-D-glucopyranosyl-(1->3)-O-.beta.-D-galactopyranosyl-(1->2)-O-[]beta.-D-xylopyranosyl-(1->4)-.beta.-D-galactopyranoside; Digitin; NSC 23471; NSC 237417
Supplier:	AG Scientific 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
Digitonin	11024-24-1	234-255-6	100

Section 3: Hazards Identification

Symbols	
HMIS Classification	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

NFPA Classification	
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Section 4: First Aid Measures

General Overview:	Consult a doctor and show this safety data sheet.
Inhalation:	Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.
Skin:	Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.
Eyes:	Flush with copious amounts of water for at least 15 minutes. Consult a doctor.
Ingestion:	Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures

Flammability of the product:	No data available
Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Hazardous thermal (de)composition products:	Carbon oxides
Special Fire Fighting Procedures:	Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.
Flash Point:	No data available

Section 6: Accidental Release Measures





Personal Precautions:	Avoid raising and breathing dust and provide adequate ventilation.
Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.

Methods for Clean-up:	Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.
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SECTION 7: Handling & Storage

Storage:	Keep container tightly closed. Recommended storage temperature: -20°C
Handling:	Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid prolonged or repeated exposure.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>NIOSH approved respirator, as conditions warrant.</p>
Skin and Body:	  <p>Compatible chemical-resistant gloves. Lab coat.</p>
Eyes:	 <p>Safety glasses</p>
Ventilation/Engineering Measures:	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower. Wash thoroughly after handling.

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	Crystalline solid
Formula	C ₅₆ H ₉₂ O ₂₉
Molecular Wt.	1229.3
Melting Pt.	232 - 235°C
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, DMF
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous decomposition products:	Carbon dioxide, Carbon monoxide
Materials to Avoid:	Strong oxidizing agents, strong acids
Conditions to avoid:	No data available

SECTION 11: Toxicological Information

RTECS#:	IH2050050
ACUTE Toxicity:	The toxicological effects of this product have not been thoroughly studied. Digitonin - Toxicity Data: Oral LD50 (rat): > 50 mg/kg; Oral LDLO (mouse): 90 mg/kg Intraperitoneal LD10 (mouse): 20 mg/kg Subcutaneous LDLO (mouse): 200 mg/kg
CHRONIC Toxicity:	Digitonin - Investigated as a mutagen and natural product. Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.
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.

	<p>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.</p> <p>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.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>
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SECTION 12: Ecological Information

Ecotoxicity:	Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
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:	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.
Contaminated Packaging:	Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: Transportation Information

UN ID#:	3462
ADR / RID (LAND):	UN# 3462 TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (Digitonin) Hazard Class: 6.1 Packaging Group: III
DOT regulations:	UN# 3462 TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (Digitonin) Hazard Class: 6.1 Packaging Group: III
IMDG/IMO (SEA):	UN# 3462

	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (Digitonin) Hazard Class: 6.1 Packaging Group: III
IATA/DGR (AIR):	UN# 3462 TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (Digitonin) Hazard Class: 6.1 Packaging Group: III
Special Provisions:	When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

SECTION 15: Regulatory Information

Health Phrases:	H301: Toxic if swallowed. H311: Toxic in contact with skin. H331: Toxic if inhaled.
Risk Phrases:	P261: Avoid breathing {dust/fume/gas/mist/vapors/spray}. P264: Wash {hands} thoroughly after handling. P280: Wear {protective gloves/protective clothing/eye protection/face protection}.
Safety Phrases:	P301+310: IF SWALLOWED: Immediately P311: Call a POISON CENTER or doctor/physician. P302+352: IF ON SKIN: Wash with plenty of soap and water. P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P321: Specific treatment {see ... on this label}. P330: Rinse mouth. P361+364: Take off immediately all contaminated clothing and wash it before reuse.
EU Regulations:	N/A
US Regulations:	TSCA: Listed California Proposition 65: No products were found.
U.S. Federal Regulations:	SARA 302/304 emergency planning and notification: No products were 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. Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found.



	Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: Acute toxicity - oral, dermal, inhalation (Cat. 3)
WHMIS (Canada):	N/A

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.*