



**Material Safety Data Sheet**

Section 1: Product and Company Identification			
<b>Product Name</b>	Esculin Anhydrous		
<b>Catalogue Number:</b>	ASC-1001	<b>CAS Number:</b>	531-75-9
<b>E-mail:</b>	Sales@ausamics.com	<b>Website:</b>	Ausamics.com

Section 2: Hazards Identification	
<b>Classification:</b> Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)	
<b>Label Elements</b>	
<b>Label Elements</b>	None required
<b>Hazards not otherwise classified (HNOC)</b>	None identified

Section 3: Composition / Information on Ingredients		
Component	CAS No	Weight %
Esculin hydrate	NA	>95
2H-1-Benzopyran-2-one, 6-(.beta.-D-glucopyranosyloxy)-7 hydroxy-	531-75-9	-

Section 4: First Aid Measures	
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Most important symptoms and effects</b>	None reasonably foreseeable.
<b>Notes to Physician</b>	Treat symptomatically



Section 5: Firefighting Measures			
Suitable Extinguishing Media		Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.	
Unsuitable Extinguishing Media		No information available	
Flash Point		No information available	
Autoignition Temperature		Not applicable	
Explosion Limits		No data available	
Upper		No data available	
Lower		No information available	
Sensitivity to Mechanical Impact		No information available	
Sensitivity to Static Discharge		No information available	
Specific Hazards Arising from the Chemical		Keep product and empty container away from heat and sources of ignition.	
Hazardous Combustion Products		Carbon monoxide (CO). Carbon dioxide (CO2).	
Protective Equipment and Precautions for Firefighters		As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.	
NFPA			
Health	Flammability	Instability	Physical hazards
0	1	0	N/A

Section 6: Accidental Release Measures	
<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.
<b>Environmental Precautions</b>	Should not be released into the environment.
<b>Methods for Containment and Clean Up</b>	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Section 7: Handling and storage	
<b>Handling</b>	Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes, or clothing. Avoid ingestion and inhalation. Avoid dust formation.
<b>Storage</b>	Keep in a dry, cool, and well-ventilated place. Keep container tightly closed. Incompatible Materials. Strong oxidizing agents.

Section 8: Exposure Controls / Personal Protection	
<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure Limits established by the region-specific regulatory bodies.
<b>Engineering Measures</b>	None under normal use conditions.



Personal Protective Equipment	
<b>Eye/face Protection</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties	
<b>Physical State</b>	Powder Solid
<b>Appearance</b>	Light cream
<b>Odor</b>	Strong
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	203 - 205 °C / 397.4 - 401 °F
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability or explosive limits</b> Upper Lower	No data available No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	No information available
<b>Solubility</b>	Slightly soluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	Not applicable
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	Not applicable



<b>Molecular Formula</b>	C <sub>15</sub> H <sub>16</sub> O <sub>9</sub> .xH <sub>2</sub> O
<b>Molecular Weight</b>	340.29

Section 10: stability and Reactivity	
<b>Reactive Hazard</b>	None known, based on information available
<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Avoid dust formation. Exposure to light. Incompatible products.
<b>Incompatible Materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

Section 11: Toxicological Information						
Acute Toxicity Product Information Component Information		No acute toxicity information is available for this product				
Toxicologically Synergistic Products		No information available				
Delayed and immediate effects as well as chronic effects from short and long-term exposure						
Irritation		No information available				
Sensitization		No information available				
Carcinogenicity		The table below indicates whether each agency has listed any ingredient as a carcinogen.				
Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Esculin hydrate	NA	Not listed	Not listed	Not listed	Not listed	Not listed
2H-1-Benzopyran-2-one,6-(.beta.-D-glucopyran osyloxy)-7-hydroxy-	531-75-9	Not listed	Not listed	Not listed	Not listed	Not listed
Mutagenic Effects		No information available				
Reproductive Effects		No information available				
Developmental Effects		No information available				
Teratogenicity		No information available				



<b>STOT - single exposure</b>	None known
<b>STOT - repeated exposure</b>	None known
<b>Aspiration hazard</b>	No information available
<b>Symptoms / effects, both acute and delayed</b>	No information available
<b>Endocrine Disruptor Information</b>	No information available
<b>Other Adverse Effects</b>	The toxicological properties have not been fully investigated.

Section 12: Ecological Information	
<b>Ecotoxicity</b>	Do not empty into drains.
<b>Persistence and Degradability</b>	based on information available. May persist
<b>Bioaccumulation/ Accumulation</b>	No information available.
<b>Mobility</b>	Is not likely mobile in the environment due its low water solubility.

Section 13: Disposal Consideration	
<b>Waste Disposal Methods</b>	Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14: Transport Information	
<b>DOT</b>	Not regulated
<b>TDG</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated

Section 15: Regulatory Information				
United States of America Inventory				
Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Esculin hydrate	NA	-	-	-



2H-1-Benzopyran-2-one,6-(.beta.-D-glucopyranosyloxy)-7-hydroxy-		531-75-9		X		ACTIVE		-		
<b>Legend:</b> TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed										
TSCA 12(b) - Notices of Export					Not applicable					
International Inventories										
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).										
Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Esculin hydrate	NA	-	-	-	-	-		-	-	-
2H-1-Benzopyran-2-one,6-(.beta.-D-glucopyranosyloxy)-7-hydroxy-	531-75-9	X	-	208-517-5	-	-		X	X	-
U.S. Federal Regulations										
SARA 313					Not applicable					
SARA 311/312 Hazard Categories					See section 2 for more information					
CWA (Clean Water Act)					Not applicable					
Clean Air Act					Not applicable					
OSHA - Occupational Safety and Health Administration					Not applicable					
CERCLA					Not applicable					
California Proposition 65					This product does not contain any Proposition 65 chemicals.					
U.S. State Right-to-Know Regulations					Not applicable					
U.S. Department of Transportation										
Reportable Quantity (RQ)					N					
DOT Marine Pollutant					N					
DOT Severe Marine Pollutant					N					
U.S. Department of Homeland Security					This product does not contain any DHS chemicals.					



Other International Regulations					
Mexico - Grade			No information available		
Authorization /Restrictions according to EU REACH					
Safety, health and environmental regulations/legislation specific for the substance or mixture					
Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Esculin hydrate	NA	Not applicable	Not applicable	Not applicable	Not applicable
2H-1-Benzopyran-2-one,6-(.beta.-D-glucopyranosyloxy)-7-hydroxy-	531-75-9	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Esculin hydrate	NA	Not applicable	Not applicable	Not applicable	Not applicable
2H-1-Benzopyran-2-one,6-(.beta.-D-glucopyranosyloxy)-7-hydroxy-	531-75-9	Not applicable	Not applicable	Not applicable	Not applicable

Section 16: Additional Notes	
Documented By	Ausamics Life Science Sales@Ausamics.com
Revision date	June 03, 2023
Summary of Revisions	This document has been revised to meet the requirements of the US OSHA HazCom 2012 Standard, which supersedes the existing regulations outlined in 29 CFR 1910.1200, in order to align with the internationally recognized globally Harmonized System of Classification and Labeling of chemicals (GHS).



**Disclaimer**

The information presented in this Safety Data sheet is accurate to the best of our knowledge, information, and belief at the time of publication. It is intended as a guide for the safe handling, use, processing, storage, transportation, disposal, and release of specific materials. However, it should be interpreted as a warranty or quality specification. The provided information pertains solely to the designated material and may not be applicable to its use in combination with other materials or in any process, unless explicitly stated in the text.