

SAFETY DATA SHEET

Creation Date 15-May-2017 Revision Date 28-March-2024 Revision Number 3

1. Identification

Product Name Esculin sesquihydrate

Cat No. : L04245

CAS-No 66778-17-4

Synonyms 6,7-Dihydroxycoumarin 6-glucoside sesquihydrate

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Not classified under the Hazardous Products Regulations (SOR/2015-17)

Based on available data, the classification criteria are not met

Label Elements

None required

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
2H-1-Benzopyran-2-one,	66778-17-4	>95
6-(.betaD-glucopyranosyloxy)-7-hydroxy-, hydrate		

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(2:3)		
2H-1-Benzopyran-2-one,	531-75-9	-
6-(.betaD-glucopyranosyloxy)-7-hydroxy-		

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point Method -No information available

No information available

Autoignition Temperature

Explosion Limits

No information available

Upper No data available
Lower No data 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

None known.

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

HealthFlammabilityInstabilityPhysical hazards010N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust

formation.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Up**

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid

contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Keep containers tightly closed in a dry, cool and well-ventilated place. Storage.

8. Exposure controls / personal protection

This product does not contain any hazardous materials with occupational exposure **Exposure Guidelines**

limitsestablished by the region specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal protective equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by **Eye Protection**

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

Hand Protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use, observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection

No protective equipment is needed under normal use conditions.

Recommended Filter type: Particle filter

Environmental exposure controls

No information available.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

9. Physical and chemical properties

Solid **Physical State**

Appearance No information available Odor No information available **Odor Threshold** No information available No information available **Melting Point/Range** No data available **Boiling Point/Range** No information available

Flash Point No information available Not applicable

Evaporation Rate

Esculin sesquihydrate

No information available

Flammability (solid, gas)

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific GravityNo information availableSolubilityNo information available

Partition coefficient; n-octanol/water No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information available

Viscosity Not applicable

Molecular Formula C15 H16 O9 . 3/2 H2 O

Molecular Weight 367.31

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information
Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

IrritationNo information availableSensitizationNo 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
2H-1-Benzopyran-2-on e.	66778-17-4	Not listed				
6-(.betaD-glucopyran osyloxy)-7-hydroxy-, hydrate (2:3)						
2H-1-Benzopyran-2-on e, 6-(.betaD-glucopyran osyloxy)-7-hydroxy-	531-75-9	Not listed				

Mutagenic Effects No information available

Reproductive EffectsNo information available.

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Developmental Effects No information available.

No information available. **Teratogenicity**

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

No information available. **Mobility**

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated Not regulated **TDG** Not regulated IATA IMDG/IMO Not regulated

15. Regulatory information

International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
2H-1-Benzopyran-2-one, 6-(.betaD-glucopyranosyloxy)-7-h ydroxy-, hydrate (2:3)	66778-17-4	-	-	-	-	-	-	-
2H-1-Benzopyran-2-one, 6-(.betaD-glucopyranosyloxy)-7-h ydroxy-	531-75-9	Х	-	Х	ACTIVE	208-517-5	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
2H-1-Benzopyran-2-one,	66778-17-4	-	-	-	-	Х	-	-	-
6-(.betaD-glucopyranosyloxy)-7-h									
ydroxy-, hydrate (2:3)									
2H-1-Benzopyran-2-one,	531-75-9	X	-	-	-	X	X	Х	-
6-(.betaD-glucopyranosyloxy)-7-h									
ydroxy-									

Legend:

Esculin sesquihydrate

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

Other International Regulations

Authorisation/Restrictions according to EU REACH

Not applicable

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)
2H-1-Benzopyran-2-one, 6-(.betaD-glucopyranosyloxy)-7-hydroxy-, hydrate (2:3)	66778-17-4	Not applicable	Not applicable	Not applicable	Not applicable
2H-1-Benzopyran-2-one, 6-(.betaD-glucopyranosyloxy)-7-hydroxy-	531-75-9	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
		Qualifying Quantities		, ,	,
		for Major Accident	for Safety Report		
		Notification	Requirements		
2H-1-Benzopyran-2-one,	66778-17-4	Not applicable	Not applicable	Not applicable	Not applicable
6-(.betaD-glucopyranosyloxy					
)-7-hydroxy-, hydrate (2:3)					
2H-1-Benzopyran-2-one,	531-75-9	Not applicable	Not applicable	Not applicable	Not applicable
6-(.betaD-glucopyranosyloxy					
)-7-hydroxy-					

16. Other information

Prepared By Product Safety Department

 ${\it Email: chem.techinfo@thermofisher.com}$

www.thermofisher.com

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Revision Summary New emergency telephone response service provider.

Disclaimer

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materials or in any process, unless specified in the text

End of SDS