according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

SECTION 1. IDENTIFICATION

Product name : Policresulen Formulation

Manufacturer or supplier's details

Company name of supplier : Merck & Co., Inc Address : 126 E. Lincoln Avenue

Rahway, New Jersey U.S.A. 07065

Telephone : 908-740-4000 Emergency telephone : 1-908-423-6000

E-mail address : EHSDATASTEWARD@merck.com

Recommended use of the chemical and restrictions on use

Recommended use : Veterinary product Restrictions on use : Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion : Category 1

Serious eye damage : Category 1

Other hazards

Corrosive to the respiratory tract.

GHS label elements

Hazard pictograms



Signal Word : Danger

Hazard Statements : H314 Causes severe skin burns and eye damage.

Supplemental Hazard State-

ments

Corrosive to the respiratory tract.

Precautionary Statements : Prevention:

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves, protective clothing, eye protection

and face protection.

Response:

P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER. P303 + P361 + P353 + P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 04/14/2025 6111733-00010 Date of first issue: 07/15/2020 3.0 Immediately call a POISON CENTER. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER. P363 Wash contaminated clothing before reuse. Storage: P405 Store locked up.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS No./Unique ID	Concentration (% w/w)	Trade secret
2-Hydroxy-3,5-bis[(4- hydroxy-2-methyl-5- sulfophenyl)methyl]-4- methylbenzenesulfonic acid	101418-00-2*	>= 15 - <= 40	TSC

^{*} Indicates that the identifier is a CAS No.

TSC- the actual concentration or concentration range is withheld as a trade secret

Disposal:

disposal plant.

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical

advice immediately.

When symptoms persist or in all cases of doubt seek medical

P501 Dispose of contents and container to an approved waste

advice.

If inhaled : If inhaled, remove to fresh air.

If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

In case of skin contact : In case of contact, immediately flush skin with plenty of water

for at least 15 minutes while removing contaminated clothing

and shoes.

Get medical attention immediately.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention immediately.

If swallowed : If swallowed, DO NOT induce vomiting.

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

If vomiting occurs have person lean forward.

Call a physician or poison control center immediately.

Rinse mouth thoroughly with water.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed Causes digestive tract burns.

d

Corrosive to respiratory system. Causes serious eye damage.

Causes severe burns.

Corrosive to the respiratory tract.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

icts

Carbon oxides Sulfur oxides

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment:

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :

tive equipment and emer-

gency procedures

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

Environmental precautions : Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

Methods and materials for containment and cleaning up

Soak up with inert absorbent material.

For large spills, provide diking or other appropriate

containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate

container.

Clean up remaining materials from spill with suitable

absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

employed in the cleanup of releases. You will need to

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe vapors or spray mist.

Do not swallow. Do not get in eyes.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure

assessment

Keep container tightly closed.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Store locked up. Keep tightly closed.

Store in accordance with the particular national regulations. Reacts with many metals to liberate hydrogen gas which can

form explosive mixtures with air. Hydrogen, a highly

flammable gas, can accumulate to explosive concentrations inside drums, or any types of steel containers or tanks upon

storage.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents

Self-reactive substances and mixtures

Organic peroxides

Explosives

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 04/14/2025 6111733-00010 Date of first issue: 07/15/2020 3.0

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-Hydroxy-3,5-bis[(4-hydroxy- 2-methyl-5- sulfophenyl)methyl]-4- methylbenzenesulfonic acid	101418-00-2	TWA	OEB 1 (1 mg/m3)	Internal

Engineering measures Use appropriate engineering controls and manufacturing

technologies to control airborne concentrations (e.g., drip-

less quick connections).

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to

protect products, workers, and the environment.

Laboratory operations do not require special containment.

Personal protective equipment

General and local exhaust ventilation is recommended to Respiratory protection

maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are

unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided

by air purifying respirators against exposure to any

hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other

circumstance where air purifying respirators may not provide

adequate protection.

Hand protection

Material Chemical-resistant gloves

Eye protection Wear safety glasses with side shields or goggles.

If the work environment or activity involves dusty conditions,

mists or aerosols, wear the appropriate goggles.

Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or

aerosols.

Skin and body protection

Work uniform or laboratory coat.

If exposure to chemical is likely during typical use, provide Hygiene measures eye flushing systems and safety showers close to the

working place.

When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the

use of administrative controls.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

Color : brown

Odor : phenol-like

Odor Threshold : No data available

pH : < 1

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : 1.135

No data available

Density : No data available

Solubility(ies)

Water solubility : partly miscible

Partition coefficient: n-

Autoignition temperature

octanol/water

: No data available

: No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : 6.78 mm²/s

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

Particle characteristics

Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.
Chemical stability : Stable under normal conditions.

Possibility of hazardous reac- : Can react with strong oxidizing agents.

tions

Conditions to avoid : None known.
Incompatible materials : Oxidizing agents

Bases

Hazardous decomposition

products

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic ac-

Acute oral toxicity

ity : LD50 (Mouse): > 2,000 mg/kg

Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.

Skin corrosion/irritation

Causes severe burns.

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic acid:

Result : Corrosive after 4 hours or less of exposure

Remarks : Based on extreme pH

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic acid:

Result : Irreversible effects on the eye Remarks : Based on skin corrosivity.

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic ac-

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

OSHANo component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic acid:

Effects on fertility : Test Type: Fertility/early embryonic development

Species: Rat

Application Route: Ingestion

Result: negative

Effects on fetal development : Test Type: Fertility/early embryonic development

Species: Rat

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

Application Route: Ingestion

Result: negative

STOT-single exposure

Corrosive to the respiratory tract.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic ac-

Species : Rat

NOAEL : 150 mg/kg

Application Route : Ingestion

Exposure time : 3 Months

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic acid:

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic effects cannot be excluded

Chronic aquatic toxicity : Toxic effects cannot be excluded

Persistence and degradability

No data available

Bioaccumulative potential

Components:

2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-4-methylbenzenesulfonic ac-

Partition coefficient: n- : log Pow: 1.60

octanol/water Remarks: Calculation

Mobility in soil

No data available

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3265

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-

sulfophenyl)methyl]-4-methylbenzenesulfonic acid)

Class : 8
Packing group : II
Labels : 8
Environmentally hazardous : no

IATA-DGR

UN/ID No. : UN 3265

Proper shipping name : Corrosive liquid, acidic, organic, n.o.s.

(2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-

sulfophenyl)methyl]-4-methylbenzenesulfonic acid)

Class : 8 Packing group : II

Labels : Corrosive
Packing instruction (cargo : 855

aircraft)

Packing instruction (passen-

n- : 851

ger aircraft)

IMDG-Code

UN number : UN 3265

Proper shipping name : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

(2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]-

4-methylbenzenesulfonic acid)

Class : 8
Packing group : II
Labels : 8
EmS Code : F-A, S-B
Marine pollutant : no

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

Domestic regulation

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

49 CFR

UN/ID/NA number : UN 3265

Proper shipping name : Corrosive liquid, acidic, organic, n.o.s.

(2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-

sulfophenyl)methyl]-4-methylbenzenesulfonic acid)

Class : 8 Packing group : II

Labels : CORROSIVE

ERG Code : 153 Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know

Water 7732-18-5 2-Hydroxy-3,5-bis[(4-hydroxy-2-methyl-5-sulfophenyl)methyl]- 101418-00-2

4-methylbenzenesulfonic acid

The ingredients of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

according to the OSHA Hazard Communication Standard



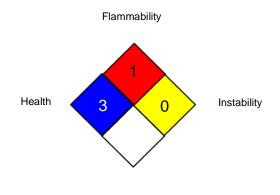
Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 3.0 04/14/2025 6111733-00010 Date of first issue: 07/15/2020

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



Special hazard

HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials: bw - Body weight: CERCLA - Comprehensive Environmental Response. Compensation. and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable

according to the OSHA Hazard Communication Standard



Policresulen Formulation

Version Revision Date: SDS Number: Date of last issue: 09/30/2023 04/14/2025 6111733-00010 Date of first issue: 07/15/2020 3.0

Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States): UN - United Nations: UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Sources of key data used to compile the Material Safety

Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

Revision Date 04/14/2025

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8