

SAFETY DATA SHEET

Creation Date 26-Sep-2009 Revision Date 24-Dec-2021 Revision Number 4

1. Identification

Product Name Mercurochrome, 24-27% Mercury

Cat No.: AC190110000; AC190110250; AC190111000

CAS No 129-16-8

Synonyms Merbromin; 2,7-Dibromo-4-hydroxymercurifluoresceine disodium salt

Recommended Use Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number For information US call: 001-800-ACROS-01 / 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

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity

Category 2
Acute dermal toxicity

Acute Inhalation Toxicity - Dusts and Mists

Category 2
Specific target organ toxicity - (repeated exposure)

Category 2
Category 2

Target Organs - Central nervous system (CNS).

Combustible dust Yes

Label Elements

Signal Word

Danger

Hazard Statements

May form combustible dust concentrations in air May cause damage to organs through prolonged or repeated exposure Fatal if swallowed, in contact with skin or if inhaled



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not get in eyes, on skin, or on clothing

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

Wear respiratory protection

Response

Get medical attention/advice if you feel unwell

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

Skin

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Gently wash with plenty of soap and water

Remove/Take off immediately all contaminated clothing

Wash contaminated clothing before reuse

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

WARNING. Reproductive Harm - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Mercury,	129-16-8	100
(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofu		
ran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium		
salt		

4. First-aid measures

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

Immediate medical attention is required.

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

attention is required.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

Do NOT induce vomiting. Call a physician or poison control center immediately. Ingestion

Most important symptoms and

effects

Notes to Physician

No information available.

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam.

No information available

Unsuitable Extinguishing Media No information available

Flash Point No information available Method -No information available

Autoignition Temperature

Explosion Limits

Upper No data available No data available Lower Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Fine dust dispersed in air may ignite. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Hydrogen halides. Bromine. Mercury oxide. Sodium oxides.

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
3	1	0	N/A

Accidental release measures

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid dust formation.

Environmental Precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment.

Up

Methods for Containment and Clean Avoid dust formation. Wear self-contained breathing apparatus and protective suit. Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

Handling and storage

Handling

Use only under a chemical fume hood. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Minimize dust generation and accumulation. Wash hands before breaks and immediately after handling the product.

Storage.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep locked up. Incompatible Materials. Strong oxidizing agents. Strong acids.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Mercury,	TWA: 0.1 mg/m ³	(Vacated) Ceiling: 0.1 mg/m ³	IDLH: 10 mg/m ³	TWA: 0.1 mg/m ³
(2',7'-dibromo-3',6'-dihydroxy	Skin		TWA: 0.05 mg/m ³	
-3-oxospiro[isobenzofuran-1(Ceiling: 0.1 mg/m ³	
3H),9'-[9H]xanthen				
]-4'-yl)hydroxy-, disodium				
salt				

Legend

ACGIH - American Conference of Governmental Industrial Hygienists OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection 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.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StateSolidAppearanceGreenOdorOdorless

Odor Threshold No information available

H 9.5 2% aq.sol

Melting Point/Range> 300 °C / 572 °FBoiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific Gravity
Solubility
No information available
No information available
No information available
No data available

Autoignition Temperature No information available

Decomposition Temperature 400 °C

Mercurochrome, 24-27% Mercury

Viscosity Not applicable

Molecular Formula C20 H8 Br2 Hg Na2 O6

Molecular Weight 750.65

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Avoid dust formation.

Incompatible Materials Strong oxidizing agents, Strong acids

Hazardous Decomposition Products Hydrogen halides, Bromine, Mercury oxide, Sodium oxides

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

Irritation May cause skin, eye, and respiratory tract irritation

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
Mercury,	129-16-8	Not listed				
(2',7'-dibromo-3',6'-dih						
ydroxy-3-oxospiro[isob						
enzofuran-1(3H),9'-[9H						
]xanthen						
]-4'-yl)hydroxy-,						
disodium salt						

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental EffectsNo information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure Central nervous system (CNS)

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

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability based on information available. May persist

Bioaccumulation/ AccumulationNo information available.

Mobility Will likely be mobile in the environment due to its water solubility.

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

UN-No UN2026

Proper Shipping Name Phenylmercuric compound, n.o.s.

Hazard Class 6.1 Subsidiary Hazard Class 9 Packing Group II

TDG

UN-No UN2026

Proper Shipping Name Phenylmercuric compound, n.o.s.

Hazard Class 6.1 Subsidiary Hazard Class 9 Packing Group II

<u>IATA</u>

UN-No UN2026

Proper Shipping Name Phenylmercuric compound, n.o.s.

Hazard Class 6.1
Packing Group

IMDG/IMO

UN-No UN2026

Proper Shipping Name Phenylmercuric compound, n.o.s.

Hazard Class 6.1 Packing Group

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Mercury, (2',7'-dibromo-3',6'-dihydroxy-3-ox ospiro[isobenzofuran-1(3H),9'-[9H] xanthen]-4'-yl)hydroxy-, disodium salt		-	-	-

Legend:

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
Mercury,	129-16-8	Х	-	204-933-6	-	-		-	-	-
(2',7'-dibromo-3',6'-dihydroxy-3-ox										
ospiro[isobenzofuran-1(3H),9'-[9H]										
xanthen]-4'-yl)hydroxy-, disodium										
salt										

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

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Mercury, (2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofu ran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt		100	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Mercury, (2',7'-dibromo-3',6'-dihydroxy-3- oxospiro[isobenzofuran-1(3H),9' -[9H]xanthen]-4'-yl)hydroxy-, disodium salt	-	-	Х	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Mercury,	X		-
(2',7'-dibromo-3',6'-dihydroxy-3-oxospir			
o[isobenzofuran-1(3H),9'-[9H]xanthen			
]-4'-yl)hydroxy-, disodium salt			

OSHA - Occupational Safety and Not applicable

Health Administration

CERCLA Not applicable

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category
Mercury,	129-16-8	Developmental	-	Developmental
(2',7'-dibromo-3',6'-dihydr				
oxy-3-oxospiro[isobenzof				
uran-1(3H),9'-[9H]xanthe				
n]-4'-yl)hydroxy-,				
disodium salt				

U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Mercury,	-	X	X	X	-
(2',7'-dibromo-3',6'-dihydr					
oxy-3-oxospiro[isobenzof					
uran-1(3H),9'-[9H]xanthe					
n]-4'-yl)hydroxy-,					
disodium salt					

U.S. Department of Transportation Reportable Quantity (RQ): Ν DOT Marine Pollutant Ν **DOT Severe Marine Pollutant** Ν

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

No information available Mexico - Grade

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	• • •
Mercury, (2',7'-dibromo-3',6'-dihydroxy-3-o	-	Use restricted. See item 18. (see link for restriction details)	-
xospiro[isobenzofuran-1(3H),9'-[9 H]xanthen]-4'-yl)hydroxy-, disodium salt		Use restricted. See item 75. (see link for restriction details)	

https://echa.europa.eu/substances-restricted-under-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)
Mercury, (2',7'-dibromo-3',6'-dihydroxy- 3-oxospiro[isobenzofuran-1(3 H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt	129-16-8	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)
Mercury, (2',7'-dibromo-3',6'-dihydroxy- 3-oxospiro[isobenzofuran-1(3 H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt	129-16-8	Not applicable	Not applicable	Х	Annex I - Y29

16. Other information

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS