

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Geratherm®

Trading name: Galinstan
Revised on 28.06.2019
Replaces at the version 10.01.2018

01. Identification of the substance or the preparation and the company

Identification of the substance or preparation: Galinstan

Other identification

REACH registration no.: tin 05-2114306920-58-0000, indium 05-2114306912-55-0000, gallium 05-2114306905-50-0000 (Pre-registration no.)

Use of the substance / preparation: as thermometer filling, hermetically filled in the medical thermometers, Hg substitute, lubricant, reflection agent, electro conductive medium

Manufacturer/supplier: Geratherm MEDICAL AG

Street/POB: Fahrenheitstr. 1

Country/ZIP codes/town: D-98716 Geschwenda

Contact for technical information: Ms Alt

Telephone: 036205/98230

Fax: 036205/98115

E-mail: m.alt@geratherm.com

Emergency information: poison emergency no. in Erfurt, tel. 0361/ 730 730

02. Hazard identification

Hazard information: n/a

Additional hazard information for humans and environment: If the normal rules of industrial hygiene are observed, no significant risk is posed by handling this product. The product does not contain any fire or explosion risk.

03. Composition/details on ingredients

Chemical characteristics: preparation made of gallium, indium and tin

Name of substance: gallium

EC no.: CAS no.: 7440-55-3

EINECS no.: 231-163-8

REACH registration no.: 05-2114306905-50-0000
(Pre-registration no.)

Name of substance: indium

EC no.: CAS no.: 7440-74-6

EINECS no.: 231-180

REACH registration no.: 05-2114306912-55-0000

Name of substance: tin

EC no.: CAS no.: 7440-31-5

REACH registration no.: 05-2114306920-58-0000

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Geratherm®

Trading name: Galinstan
Revised on 28.06.2019
Replaces at the version 10.01.2018

EINECS no.: 231-141-8

04. First aid measures

General information: No general information is necessary.

Inhalation: No exposure by inhalation possible.

Skin contact: Wash off with soap and water.

Eye contact: Rinse with lukewarm water with the edge of the eyelid open; consult an ophthalmologist, if necessary.

Ingestion: Keep calm, go to doctor and present this data sheet.

Information for the doctor: We are not aware of any special treatment required. Treat the symptoms.

05. Fire-fighting measures

Suitable extinguishing media: The product is not flammable.

Unsuitable extinguishing media: Spray is not suitable for the overheated substance.

Special risks posed by the substance or the preparation itself, its combustion products or gases emitted: If gases/oxides form, use protective equipment/breathing apparatus.

Special protective equipment when fighting fires: Wear breathing apparatus that does not depend on ambient air supply.

Additional information: None

06. Measures in case of accidental release

Personal precautions: Beware of possible risk of slipping caused by product leaking or spilling.

Environmental precautions: Do not allow the material to get into wastewater. Does not pose a threat to water supplies (self-assessment).

Methods for cleaning up: Suck up (gun) or sweep up large amounts and feed them into plastic containers (not aluminium receptacles) for recycling. Remove product remains using a soapy solution. Prevent dust formation.

Additional information

07. Handling and storage

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Geratherm®

Trading name: Galinstan
Revised on 28.06.2019
Replaces at the version 10.01.2018

Safe handling: Avoid spillage. Prevent any unnecessary contact with other chemicals. Handling unpacked Galinstan may alter its quality and degree of purity. Geratherm accepts no liability for changes or product quality resulting from processing the substance.

Information on fire and explosion protection: No special measures required.

Other information

Storage information: Do not store with oxidising or acidic substances.

08. Exposure controls / personal protection

Limits for exposure at workplace and/or biological thresholds

Workplace limits in Germany: Ingredients with workplace-specific limits to be controlled: not applicable

Personal protection

Respiratory protection: P3 respiratory protection in an emergency producing oxide fumes.

Hand protection: In case of repeated and continuous contact with skin, wear gloves of nitrile rubber. Use lipid-balancing cream, if required.

Eye protection: Wear safety goggles in case of possible eye contact through splashing.

Body protection: Wear suitable work clothing in case of splashing risk or other possible body contact

Information for work hygiene: Wash hands after work and before breaks. Industrial hygiene

09. Physical and chemical properties

Appearance

Aggregate state: liquid

Colour: silver

Odour: odourless

Safety data

Risk of explosion: none

Lower explosion limit:

Upper explosion limit:

Vapour pressure: < 10(-8) torr

Density: 6.44 g/cc.

Discharge time: not applicable

Water solubility: insoluble

pH: n/a

Boiling point/range: > 1300 °C

Flash point: n/a

Ignition temperature: n/a

10. Stability and reactivity

Conditions to avoid: Exothermic with aluminium and when water is added subsequently!

Trading name: Galinstan
Revised on 28.06.2019
Replaces at the version 10.01.2018

Materials to avoid: Halogens, hydrogen peroxide/hydrogen chloride, chlorine, bromine, aluminium. Dangerous reactions with strong acids or oxidation agents

Hazardous decomposition products: None if substance is used properly.

Other information: The product amalgamates with metals on the surface like copper, tin, lead, zinc, gold and silver jewellery, particularly also with light metals on the surface, especially if these are free of oxides. If necessary, the product has to be tested for reactions to materials and chemical substances for a specific application.

11. Toxicological information

Toxicological tests

Experience from practice – effects on people

No adverse effects if used properly and if general work hygiene is observed.

Information on ingredients:

Estimation based on the raw materials: Due to the available data on the toxicity of the individual components and the intended use according to our experience and the information available the product does not pose any threat to human health.

12. Ecological information

Ecotoxicity: We do not have any quantitative information on the ecological effects of the product.

13. Information on disposal

Recommendation: Intended use or recycling are to be given preference to disposal. Disposal according to the applicable local legislation on waste disposal (authorities obligation to give information)

14. Transport information

14.1 ID No. UN 1760

14.2 proper shipping name: Corrosive liquid, n.o.s. (composition contains ca.70 % gallium)

14.3 transport hazard class: 8, hazard label: 8

14.4 packing group: III

14.5 no environmental hazards

14.6 special precautions for user: avoid contact with
aluminium and precious metals (gold and silver jewellery)

14.7 transport in bulk: not provided



The instructions and restrictions of IATA, IMDG-code and ADR must be followed.

The volume of Galinstan per clinical glass thermometers is not more than 0,125 ml.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

Geratherm®

Trading name: Galinstan
Revised on 28.06.2019
Replaces at the version 10.01.2018

Exemptions for quantities de minimis, accepted quantities and limited quantities are possible dependent on units of clinical glass thermometers.

15. Regulatory information

Labelling according to GHS (Directive (EC) 1272/2008)

Classification

Symbols:



Signal word: Caution

Hazard information: H 290 may be corrosive to metals
H 315 causes skin irritation

Safety information: P 302 CONTACT WITH SKIN
P 353 Rinse skin with water / shower
P 406 Store in non-corrosive, non-metallic containers

Material safety assessment: The normal precautions for dealing with chemicals should be observed.

Labelling according to EC Directive 67/548/EEC or Directive 1999/45/EC:

The alloy is not a hazardous working material in the meaning of this Directive.

National regulations

Water hazard class

Class: not dangerous for water (self-assessment)

16. Other information

The information is based on the present state of our knowledge and is to describe the product with reference to the safety measures that must be taken. This information does promise any properties of the product described.

Department issuing the data sheet: Laboratory, Ms Alt
