

according to the Global Harmonized System (and with all of the information required by the HPR)

Revision Date 06/14/2018

Version 1.6

SECTION 1.Identification

Product identifier

Product number 108782

Product name Zinc sticks, triangular cross section about 8 mm for analysis

EMSURE®

CAS-No. 7440-66-6

Relevant identified uses of the substance or mixture and uses advised against

Identified uses Reagent for analysis, Chemical production

Details of the supplier of the safety data sheet

Company Millipore (Canada) Ltd | 109 Woodbine Downs Blvd. Unit 5 | Etobicoke

| Ontario M9W 6Y1 | Canada | General Inquiries: +1 800-645-5476 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5) MilliporeSigma is a business of Merck KGaA, Darmstadt, Germany.

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

SECTION 2. Hazards identification

GHS-Labeling

Not a dangerous substance according to GHS.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula Zn (Hill)
Molar mass 65.39 g/mol

Remarks WHMIS hazardous composition: No ingredients are hazardous

according to the CPR criteria.

SECTION 4. First aid measures

Description of first-aid measures

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number 108782 Version 1.6

Product name Zinc sticks, triangular cross section about 8 mm for analysis EMSURE®

Inhalation

After inhalation: fresh air.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/

shower.

Eye contact

After eye contact: rinse out with plenty of water.

Ingestion

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Pain, Fever, Nausea, Vomiting, cardiovascular disorders, muscular symptoms

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

Advice for firefighters

Special protective equipment for fire-fighters

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

Further information

none

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions

No special precautionary measures necessary.

Methods and materials for containment and cleaning up

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number 108782 Version 1.6

Product name Zinc sticks, triangular cross section about 8 mm for analysis EMSURE®

Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly.

Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Store at $+5^{\circ}$ C to $+30^{\circ}$ C ($+41^{\circ}$ F to $+86^{\circ}$ F).

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eye/face protection

Safety glasses

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection

required when dusts are generated.

SECTION 9. Physical and chemical properties

Physical state solid

Color No information available.

Odor No strong odor known.

Odor Threshold No information available.

pH No information available.

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number 108782 Version 1.6

Product name Zinc sticks, triangular cross section about 8 mm for analysis EMSURE®

Melting point No information available.

Boiling point No information available.

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapor pressure No information available.

Relative vapor density No information available.

Density No information available.

Relative density No information available.

Water solubility No information available.

Partition coefficient: n-

octanol/water

Autoignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

SECTION 10. Stability and reactivity

Reactivity

See below

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

No information available.

Possibility of hazardous reactions

Exothermic reaction with:

alkali hydroxides, carbon disulfide, Acids, alkalines

Chlorine, with, Moisture.

Risk of explosion with:

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number 108782 Version 1.6

Product name Zinc sticks, triangular cross section about 8 mm for analysis EMSURE®

ammonium compounds, azides, chlorates, metal catalysts, Nitric acid, hydrazine and derivatives, Hydrogen, Halogenated hydrocarbon, nitrates, Peroxides, cadmium, chromium(VI) oxide, peroxi compounds, Nitro compounds, performic acid

Risk of ignition or formation of inflammable gases or vapors with:

Arsenic oxides, Sodium hydroxide

Tellurium, with, heat

Conditions to avoid

Exposure to moisture.

Incompatible materials

no information available

Hazardous decomposition products

no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

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.

OSHA No 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.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

Further information

After absorption:

Fever, pain, cardiovascular disorders, Nausea, Vomiting, muscular symptoms

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number 108782 Version 1.6

Product name Zinc sticks, triangular cross section about 8 mm for analysis EMSURE®

On the basis of the morphology of the product, no hazardous properties are to be expected when it is handled and used with appropriate care.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

United States of America

Canada

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number 108782 Version 1.6

Product name Zinc sticks, triangular cross section about 8 mm for analysis EMSURE®

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Revision Date06/14/2018

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.