

Page 1/8

SAFETY DATA SHEET In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

1 Identification of the Substance/Mixture and Company

Product Name: Rubeanic Acid (Dithiooxamide)

SDS Code: SSAHRAC CAS Number: 79-40-3 EC number: 201-203-9

Product Description: Laboratory Reagent

Manufacturer/Supplier:

American MasterTech 1330 Thurman Street Lodi, CA 95240 USA (800) 860-4073

European Authorized Representative: Emergo Europe Prinsessegracht 20 2514 AP The Hague, The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture



Acute Tox. 4 H302 Harmful if swallowed.

Label elements GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms



Signal word Warning Hazard-determining components of labeling: dithiooxamide Hazard statements Harmful if swallowed. Precautionary statements Wash thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. Dispose of contents/container in accordance with local/regional/national/international regulations.

Review Date 01/22/2018

Revision Date 01/22/2018

Product Name: Rubeanic Acid (Dithiooxamide)

Classification system: NFPA ratings (scale 0 - 4) Health = 2 Fire = 0 Reactivity = 1 HMIS-ratings (scale 0 - 4) Health = 2 Fire = 0 Reactivity = 1 Other hazards Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

3 Composition

Chemical characterization: Substances CAS No. Description 79-40-3 dithiooxamide Identification number(s) EC number: 201-203-9

4 First Aid Measures

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: Immediately call a doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5 Firefighting Measures

Extinguishing media

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Not required. **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

Review Date 01/22/2018

Product Name: Rubeanic Acid (Dithiooxamide)

Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

PAC-1:

Substance is not listed.

PAC-2:

Substance is not listed.

PAC-3:

Substance is not listed.

7 Handling and Storage

Handling:

Precautions for safe handling: No special precautions are necessary if used correctly. **Information about protection against explosions and fires:** No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace: Not required. **Additional information:** The lists that were valid during the creation were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Review Date 01/22/2018

Product Name: Rubeanic Acid (Dithiooxamide)

Eye protection: Not required.

| Physical and Chemical Pro | operties |
|--|---|
| | • |
| Information on basic physical and General Information | chemical properties |
| Appearance | |
| Form: | Crystalline powder |
| Color: | Red |
| Odor: | Nearly odorless |
| Odor threshold: | Not determined. |
| pH-value: | Not applicable. |
| Change in condition | |
| Melting point/Melting range: | 245 °C (473 °F) |
| Boiling point/Boiling range: | Undetermined. |
| Flash point: | Not applicable. |
| Flammability (solid, gaseous): | Product is not flammable. |
| Decomposition temperature: | Not determined. |
| Auto igniting: | Not determined. |
| Danger of explosion: | Product does not present an explosion hazard. |
| Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| Vapor pressure: | Not applicable. |
| Density: | Not determined. |
| Relative density: | Not determined. |
| Vapour density: | Not applicable. |
| Evaporation rate: | Not applicable. |
| Solubility in / Miscibility with | |
| Water: | Soluble. |
| Partition coefficient (n-octanol/wat | |
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |
| Other information: | No further relevant information available. |

10 Stability and Reactivity

Reactivity: No further relevant information available. Chemical stability: Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions: No dangerous reactions known. Conditions to avoid: No further relevant information available. Incompatible materials: No further relevant information available.

Review Date 01/22/2018

Product Name: Rubeanic Acid (Dithiooxamide)

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicology Information

Information on toxicological effects Acute toxicity:

LD/LC50 values that are relevant for classification:

79-40-3 dithiooxamide

Oral LD50 350 mg/kg (mouse)

Primary irritant effect:

On the skin: No irritant effect. On the eye: No irritating effect. Sensitization: No sensitizing effects known. Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Mobility in soil: No further relevant information available.
Additional ecological information:
General notes:
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Results of PBT and vPvB assessment
PBT: Not applicable.
VPvB: Not applicable.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Review Date 01/22/2018

Product Name: Rubeanic Acid (Dithiooxamide)

Recommended cleansing agent: Water, if necessary with cleansing agents.

| N-Number | |
|--|-----------------|
| DOT, ADR, ADN, IMDG, IATA | Not applicable |
| UN proper shipping name DOT, ADR, ADN, IMDG, IATA | Not applicable |
| Fransport hazard class(es) | |
| DOT, ADR, ADN, IMDG, IATA | |
| Class | Not applicable |
| Packing group | |
| DOT, ADR, IMDG, IATA | Not applicable |
| Environmental hazards | |
| Marine pollutant: | No |
| Special precautions for user: | Not applicable. |
| Transport in bulk according to Annex | |
| MARPOL73/78 and the IBC Code: | Not applicable. |
| UN "Model Regulation": | Not applicable |

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA

| Section 355 (extremely hazardous substances): | |
|---|--|
| Substance is not listed. | |
| Section 313 (Specific toxic chemical listings): | |
| Substance is not listed. | |
| TSCA (Toxic Substances Control Act): | |
| Substance is listed. | |
| TSCA new (21st Century Act) (Substances not listed) Proposition 65 | |
| Chemicals known to cause cancer: | |
| Substance is not listed. | |
| Chemicals known to cause reproductive toxicity for females: | |
| Substance is not listed. | |
| Chemicals known to cause reproductive toxicity for males: | |
| Substance is not listed. | |
| Chemicals known to cause developmental toxicity: | |
| Substance is not listed. | |

Review Date 01/22/2018

Product Name: Rubeanic Acid (Dithiooxamide)

Carcinogenic categories

EPA (Environmental Protection Agency)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). **Hazard pictograms**



Signal word Warning

Hazard-determining components of labeling: dithiooxamide
Hazard statements
Harmful if swallowed.
Precautionary statements
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073 **Date of preparation / last revision** 01/22/2018 / -

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)

Review Date 01/22/2018

Revision Date 01/22/2018

Product Name: Rubeanic Acid (Dithiooxamide)

HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 4: Acute toxicity – Category 4

Copyright © 2018-2019 American MasterTech Scientific. All rights reserved.

No part of these pages may be used for any purpose other than personal use. Therefore, reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, for reasons other than personal use, is strictly prohibited without prior written permission.

- US —