

Page 1 / 12 Creation Date 15-Nov-2005 Revision Date 12-Jun-2024 Version 7

SDS No. Exempt, SR&D

MOEL's Public Notice No. 2023-9 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Alizarin Complexone dihydrate

Cat No. : C15583

Synonyms (3,4-Dihydroxy-2-anthraquinonyl)methyliminodiacetic acid dihydrate; Alizarin fluorine blue

CAS No 455303-00-1

Molecular Formula C19 H15 N O8 . 2 H2 O

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Details of the supplier of the safety data sheet

Importer Supplier

Fisher Scientific Korea Thermo Fisher Scientific Chemicals, Inc.

D5,D6, Incheon Airport Logistics Complex 30 Bond Street

150, Gonghangdong-Ro 296 Beon-Gil Ward Hill, MA 01835-8099

Jung-Gu, Incheon Tel: +82-1661-9555 Fax: +82-2-2023-0603

E-mail address Chem.KR@thermofisher.com

Emergency Telephone Number

Emergency telephone: Medical: +(82) 070-7686-0086 or + 1-703-741-5970

CHEMTREC: 080 822 1374 (Local), CHEMTREC: 1-800-424-9300 or + 1-703-527-3887

Korea: 00-308-13-2549 (24 hours a day, 7 days a week)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

Label Elements

Revision Date 12-Jun-2024

Other Hazards

This product does not contain any known or suspected endocrine disruptors

NFPA

Health **Flammability** Instability Physical hazards 0 N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

| Component | Common Name | CAS No | Index No | Weight % |
|---------------------------------------|-------------------------|-------------|------------|----------|
| Alizarin Complexone dihydrate | (3,4-Dihydroxy-2-anth | 455303-00-1 | Not listed | 99 - 100 |
| | raquinonyl)methylimi | | | |
| | nodiacetic acid | | | |
| | dihydrate; Alizarin | | | |
| | fluorine blue | | | |
| Glycine, | Alizarin fluorine blue; | 3952-78-1 | KE-04832 | - |
| N-(carboxymethyl)-N-[(9,10-dihydro-3, | | | | |
| 4-dihydroxy-9,10-dioxo-2-anthracenyl) | raquinonyl)methylimi | | | |
| methyl]- | nodiacetic acid | | | |
| | dihydrate; Glycine, | | | |
| | N-(carboxymethyl)-N- | | | |
| | [(9,10-dihydro-3,4-dih | | | |
| | ydroxy-9,10-dioxo-2- | | | |
| | anthracenyl)methyl]- | | | |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General Advice If symptoms persist, call a physician.

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

medical attention.

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

immediately if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

Self-Protection of the First Aider No special precautions required.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

Alizarin Complexone dihydrate

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2).

Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

<u>Personal Precautions, Protective Equipment and Emergency Procedures</u>

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

Specific End Uses

Use in laboratories.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| goning of the distriction of th | | | | |
|--|-------------|------------|------------|------------|
| Component | CAS No | Korea | ACGIH TLV | OSHA PEL |
| Alizarin Complexone | 455303-00-1 | Not listed | Not listed | Not listed |

Revision Date 12-Jun-2024

Alizarin Complexone dihydrate

Revision Date 12-Jun-2024

| dihydrate | | | | |
|------------------------------|-----------|------------|------------|------------|
| Glycine, | 3952-78-1 | Not listed | Not listed | Not listed |
| N-(carboxymethyl)-N-[(9,10- | | | | |
| dihydro-3,4-dihydroxy-9,10-d | | | | |
| ioxo-2-anthracenyl)methyl]- | | | | |

| Component | CAS No | European Union | The United Kingdom | Germany |
|--|-------------|----------------|--------------------|------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not listed | Not listed | Not listed |
| Glycine, N-(carboxymethyl)-N-[(9,10- dihydro-3,4-dihydroxy-9,10-d ioxo-2-anthracenyl)methyl]- | | Not listed | Not listed | Not listed |

ACGIH - Biological Exposure Indices

| Component | CAS No | ACGIH - Biological Exposure Indices |
|--|-------------|-------------------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not listed |
| Glycine, N-(carboxymethyl)-N-[(9,10- dihydro-3,4-dihydroxy-9,10-d ioxo-2-anthracenyl)methyl]- | | Not listed |

Exposure Controls Engineering Measures

None under normal use conditions.

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles)

Hand Protection Protective gloves
Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Personal protective equipment Use only those certified by the Korea Occupational Safety and Health Administration.

Respiratory Protection No protective equipment is needed under normal use conditions

Recommended Filter type: Particle filter

<u>Hygiene Measures</u> Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls No information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Alizarin Complexone dihydrate Revision Date 12-Jun-2024

Solid

Solid

Solid

Appearance (Physical State, Color, Amber Powder Solid

etc.) Odor

Odorless

Odor Threshold No data available PH No information available

Melting Point/Range 180 - 185 °C / 356 - 365 °F

Softening Point No data available
Boiling Point/Range No information available

Flash Point No information available Method - No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Explosion Limits No data available

Vapor PressureNo data availableVapor DensityNot applicable

Specific Gravity / Density

Bulk Density

Water Solubility

No data available
No data available
Slightly soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

| Component | CAS No | log Pow |
|---------------------------------------|-------------|-------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | No data available |
| Glycine, | 3952-78-1 | No data available |
| N-(carboxymethyl)-N-[(9,10-dihydro-3, | | |
| 4-dihydroxy-9,10-dioxo-2-anthracenyl) | | |
| methyl]- | | |

Autoignition Temperature No data available Decomposition Temperature No data available

Viscosity No data available

No data available

No data available

Explosive Properties

Oxidizing Properties

No information available
No information available

Molecular Formula C19 H15 N O8 . 2 H2 O

Molecular Weight 421.35

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None known, based on information available

<u>Chemical Stability</u>
Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

Alizarin Complexone dihydrate Revision Date 12-Jun-2024

Conditions to Avoid

Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information No acute toxicity information is available for this product

Information on expected route of exposure

Inhalation May cause irritation of respiratory tract.

Ingestion Ingestion may cause irritation to mucous membranes.

Eyes Irritating to eyes. Skin Irritating to skin.

Information on Health Hazards

(a) acute toxicity;

OralNo data availableDermalNo data availableInhalationNo data available

| Component | CAS No | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--|-------------|-------------------|-------------------|-------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | No data available | No data available | No data available |
| Glycine, | 3952-78-1 | No data available | No data available | No data available |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | | | |
| vdroxy-9.10-dioxo-2-anthracenyl)methyll- | | | | |

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

| Component | CAS No | Test method | Test species | Study result |
|--|-------------|-------------------|-------------------|-------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | No data available | No data available | No data available |
| Glycine, | 3952-78-1 | No data available | No data available | No data available |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | | | |
| vdroxy-9.10-dioxo-2-anthracenyl)methyl]- | | | | |

(e) germ cell mutagenicity; No data available

| Component | CAS No | Test method | Test species | Study result |
|--|-------------|-------------------|-------------------|-------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | No data available | No data available | No data available |
| Glycine, | 3952-78-1 | No data available | No data available | No data available |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | | | |
| ydroxy-9,10-dioxo-2-anthracenyl)methyl]- | | | | |

(f) carcinogenicity; No data available

Alizarin Complexone dihydrate

Revision Date 12-Jun-2024

| Component | CAS No | Test method | Test species / Duration | Study result |
|--|-------------|-------------------|----------------------------|-------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | No data available | No data available | No data available |
| Glycine, | 3952-78-1 | No data available | No data available | No data available |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | | | |
| ydroxy-9,10-dioxo-2-anthracenyl)methyl]- | | | | |

There are no known carcinogenic chemicals in this product

| Component | CAS No | IARC | NTP | ACGIH | OSHA | UK |
|--|-------------|------------|------------|------------|------------|------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not listed |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dihyd roxy-9,10-dioxo-2-anth racenyl)methyl]- | | Not listed |

(g) reproductive toxicity; No data available

| Component | CAS No | Test method | Test species / Duration | Study result |
|--|-------------|-------------------|----------------------------|-------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | No data available | No data available | No data available |
| Glycine, | 3952-78-1 | No data available | No data available | No data available |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | | | |
| ydroxy-9,10-dioxo-2-anthracenyl)methyl]- | | | | |

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable

Solid

Other Adverse Effects
No information available.

| Component | CAS No | EU - Endocrine | EU - Endocrine | Japan - Endocrine |
|--|-------------|----------------------|------------------------|-----------------------|
| | | Disrupters Candidate | Disruptors - Evaluated | Disruptor Information |
| | | List | Substances | - |
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, | 3952-78-1 | Not applicable | Not applicable | Not applicable |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | | | |
| ydroxy-9,10-dioxo-2-anthracenyl)methyl]- | | | | |

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects Do not empty into drains.

| Component | CAS No | Freshwater Fish | Water Flea | Freshwater Algae | Microtox |
|-------------------------------------|-------------|-------------------|-------------------|-------------------|-------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | No data available | No data available | No data available | No data available |
| Glycine, | 3952-78-1 | No data available | No data available | No data available | No data available |
| N-(carboxymethyl)-N-[(9,10-dihydro- | | | | | |
| 3,4-dihydroxy-9,10-dioxo-2-anthrace | | | | | |
| nyl)methyl]- | | | | | |

Alizarin Complexone dihydrate Revision Date 12-Jun-2024

Persistence and degradability

Persistence May persist, based on information available.

Bioaccumulative potential May have some potential to bioaccumulate

<u>Mobility in soil</u> Is not likely mobile in the environment due its low water solubility.

Ozone Depletion Potential

| Component | CAS No | Ozone Depletion Potential |
|--|-------------|---------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not listed |
| Glycine, | 3952-78-1 | Not listed |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | |
| ydroxy-9,10-dioxo-2-anthracenyl)methyl]- | | |

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused

Products

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.

Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport Not Regulated

IATA Not regulated

IMDG/IMO Not regulated

Marine Pollutant No hazards identified

Special Precautions for User No special precautions required

SECTION 15: REGULATORY INFORMATION

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

Legend: X - Listed '-' - Not Listed

International Inventories

| Component | CAS No | KECL | TSCA | EINECS | IECSC | DSL | NDSL | PICCS | ENCS | ISHL | AICS |
|------------------------------|-------------|----------|------|-----------|-------|-----|------|-------|------|------|------|
| Alizarin Complexone | 455303-00-1 | - | - | - | - | - | - | - | - | | - |
| dihydrate | | | | | | | | | | | |
| Glycine, | 3952-78-1 | KE-04832 | Χ | 223-544-2 | Х | Х | - | - | - | | Х |
| N-(carboxymethyl)-N-[(9,10- | | | | | | | | | | | |
| dihydro-3,4-dihydroxy-9,10-d | | | | | | | | | | | |
| ioxo-2-anthracenyl)methyl]- | | | | | | | | | | | |

| Γ | Component | CAS No | Seveso III Directive | Seveso III Directive | Rotterdam | Basel Convention |
|---|-----------|--------|------------------------------|----------------------|------------------|-------------------|
| | · | | (2012/18/EC) - | (2012/18/EC) - | Convention (PIC) | (Hazardous Waste) |
| L | | | Qualifying Quantities | | | |

Alizarin Complexone dihydrate

Revision Date 12-Jun-2024

| | | for Major Accident Notification | for Safety Report Requirements | | |
|---|-------------|------------------------------------|-----------------------------------|----------------|----------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-di hydro-3,4-dihydroxy-9,10-diox o-2-anthracenyl)methyl]- | | Not applicable | Not applicable | Not applicable | Not applicable |

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential |
|-------------------------------------|-------------|----------------|---------------------------------|------------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, | 3952-78-1 | Not applicable | Not applicable | Not applicable |
| N-(carboxymethyl)-N-[(9,10-dihydro- | | | | |
| 3,4-dihydroxy-9,10-dioxo-2-anthrace | | | | |
| nyl)methyl]- | | | | |

Korean National Regulations

| Component | CAS No | Act on Registration and Evaluation of Chemical Substances (K-REACH) | Authorised Chemicals | Existing Substances Subject to Registration |
|--|-------------|---|----------------------|--|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro- 3,4-dihydroxy-9,10-dioxo-2-anthrace nyl)methyl]- | | Annex 1 - KE-04832 | Not applicable | Not applicable |

| Component | CAS No | Chemical Control Act - Toxic Chemicals | Chemical Control Act - Prohibited Chemicals | Chemical Control Act - Use Restricted Chemicals |
|---|-------------|---|--|---|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro- 3,4-dihydroxy-9,10-dioxo-2-anthrace nyl)methyl]- | | Not applicable | Not applicable | Not applicable |

| Component | CAS No | Chemical Control Act - Accident Precaution Chemicals (% in mixtures) | Chemical Control Act - Accident Precaution Chemicals - Quantity limits Storage (% in mixtures) | Chemical Control Act - Accident Precaution Chemicals - Quantity limits Manufacture/Use (% in mixtures) |
|--|-------------|---|--|--|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro- 3,4-dihydroxy-9,10-dioxo-2-anthrace nyl)methyl]- | | Not applicable | Not applicable | Not applicable |

| Component | CAS No | Waste Control Law | Ministry of Environment CMR risk | -Ministry of Environment - Critically Controlled Substance |
|--|-------------|-------------------|----------------------------------|--|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro- 3,4-dihydroxy-9,10-dioxo-2-anthrace nyl)methyl]- | | Not applicable | Not applicable | Not applicable |

| Component | CAS No | ISHA - Harmful Agents Subject to Work Environment Monitoring | ISHA - Prohibited substances | ISHA - Substances requiring permission |
|-------------------------------------|-------------|--|------------------------------|--|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, | 3952-78-1 | Not applicable | Not applicable | Not applicable |
| N-(carboxymethyl)-N-[(9,10-dihydro- | | | | |
| 3,4-dihydroxy-9,10-dioxo-2-anthrace | | | | |
| nyl)methyl]- | | | | |

Revision Date 12-Jun-2024

| Component | CAS No | ISHA - Substances subject to control | ISHA - Harmful Agents Requiring Health Examination | ISHA - Permissible Exposure Limits |
|---|-------------|---|--|---------------------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro- 3,4-dihydroxy-9,10-dioxo-2-anthrace nyl)methyl]- | | Not applicable | Not applicable | Not applicable |

| Component | CAS No | ISHA - Subject to Process Safety Reports (minimum quantity) | ISHA - Threshold Limit Values (TLVs) Chemicals | ISHA - Special management materials |
|--|-------------|---|---|-------------------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro- 3,4-dihydroxy-9,10-dioxo-2-anthrace nyl)methyl]- | | Not applicable | Not applicable | Not applicable |

National Fire Association - Dangerous Substances Minimum quantity requiring a permit

| Component | CAS No | Class 1 - Oxidising solids | Class 2 - Flammable solid | Class 3 - Spontaneously Combustible Substances and Dangerous Substances When Wet | Class 4 - Flammable liquids | Class 5 - Self-reactive substances | Class 6 - Oxidising liquids |
|--|-------------|----------------------------------|---------------------------------|--|-----------------------------------|--|-----------------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9 ,10-dihydro-3,4-dihydrox y-9,10-dioxo-2-anthrace nyl)methyl]- | 3952-78-1 | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |

Control Parameters

| Component | CAS No | Korea | ACGIH - Biological Exposure Indices |
|-------------------------------------|-------------|------------|-------------------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not listed | Not listed |
| Glycine, | 3952-78-1 | Not listed | Not listed |
| N-(carboxymethyl)-N-[(9,10-dihydro- | | | |
| 3,4-dihydroxy-9,10-dioxo-2-anthrace | | | |
| nyl)methyl]- | | | |

<u>US Management Information</u> **OSHA** - Occupational Safety and Health Administration

Not applicable

| Component | CAS No | Specifically Regulated Chemicals | Highly Hazardous Chemicals |
|--|-------------|----------------------------------|----------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable |
| Glycine, | 3952-78-1 | Not applicable | Not applicable |
| N-(carboxymethyl)-N-[(9,10-dihydro-3,4-dih | | | |
| ydroxy-9,10-dioxo-2-anthracenyl)methyl]- | | | |

CERCLA Not applicable

| Component | CAS No | CERCLA Extremely Hazardous Substances RQs | Hazardous Substances RQs | SARA 313 - Threshold Values % |
|--|-------------|---|-----------------------------|----------------------------------|
| Alizarin Complexone dihydrate | 455303-00-1 | Not applicable | Not applicable | Not applicable |
| Glycine, N-(carboxymethyl)-N-[(9,10-dihydro- 3,4-dihydroxy-9,10-dioxo-2-anthrace | | Not applicable | Not applicable | Not applicable |

Alizarin Complexone dihydrate

Revision Date 12-Jun-2024

nyl)methyl]-

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Based on available data, the classification criteria are not met.

SECTION 16: OTHER INFORMATION

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Substances/EU List of Notified Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

TWA - Time Weighted Average **ACGIH** - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% POW - Partition coefficient Octanol:Water IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association**

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Prepared By Health, Safety and Environmental Department

Creation Date 15-Nov-2005 12-Jun-2024 **Revision Date**

Revision Number

Revision Summary New emergency telephone response service provider.

MOEL's Public Notice No. 2023-9 (Standards for Classification and Labeling of Chemical **Substances and Safety Data Sheets)**

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

Revision Date 12-Jun-2024

materials or in any process, unless specified in the text

End of Safety Data Sheet