Thermo Fisher SCIENTIFIC

SAFETY DATA SHEET

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Revision Date 01-May-2024
Version 3

AI FAAB21693

Direct red 80

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

产品说明: 直接红80 Product Description: Direct red 80

Cat No. : B21693 CAS No 2610-10-8

Molecular Formula C45 H26 N10 Na6 O21 S6

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

Emergency Telephone Number For information US call: 001-800-227-6701 / 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

E-mail address begel.sdsdesk@thermofisher.com

Recommended Use Laboratory chemicals.
Uses advised against No Information available

SECTION 2. HAZARD IDENTIFICATION

Physical State Appearance Odor

Solid No information available No information available

Emergency Overview

The product contains no substances which at their given concentration are considered to be hazardous to health.

Classification of the substance or mixture

Based on available data, the classification criteria are not met

Label Elements

None required

Physical and Chemical Hazards

None identified.

Health Hazards

The product contains no substances which at their given concentration are considered to be hazardous to health.

Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight % |
|---|-----------|----------|
| 2-Naphthalenesulfonic acid, | 2610-10-8 | <=100 |
| 7,7'-(carbonyldiimino)bis[4-hydroxy-3-[[2-sulfo-4-[(4-sulfophenyl)azo]phenyl]azo]-, | | |
| hexasodium salt | | |

SECTION 4. FIRST AID MEASURES

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.

Inhalation

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

Ingestion

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

Most important symptoms and effects

None reasonably foreseeable.

Self-Protection of the First Aider

No special precautions required.

Notes to Physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂). Powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

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

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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

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

Environmental Precautions

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

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Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Exposure Controls

Engineering Measures

None under normal use conditions. .

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Nitrile rubber | See manufacturers | - | EN 374 | (minimum requirement) |
| Neoprene | recommendations | | | |
| Natural rubber | | | | |
| PVC | | | | |

Inspect gloves before use.

Skin and body protection

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.

| Respiratory Protection | No protective equipment is needed under normal use conditions. |
|------------------------|--|

Long sleeved clothing

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

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

No information available. **Environmental exposure controls**

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Solid

Solid

Appearance

Physical State Solid

No information available **Odor Threshold** No data available No information available **Melting Point/Range** No data available

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

Method - No information available

Evaporation Rate Not applicable Solid

Flammability (solid,gas) No information available

Explosion Limits No data available

No data available **Vapor Pressure Vapor Density** Not applicable

Specific Gravity / Density No data available **Bulk Density** No data available Water Solubility No information available Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

log Pow Component 2-Naphthalenesulfonic acid, -2.82 7,7'-(carbonyldiimino)bis[4-hydroxy-3-[[2-sulfo-4-[(4-sulfophenyl)azo]phenyl]az

o]-, hexasodium salt

Autoignition Temperature No data available **Decomposition Temperature** No data available **Viscosity** Not applicable

Explosive Properties No information available **Oxidizing Properties** No information available

C45 H26 N10 Na6 O21 S6 **Molecular Formula**

Molecular Weight 1373.09

SECTION 10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

None under normal processing. **Hazardous Reactions Hazardous Polymerization** No information available.

None known. **Conditions to Avoid**

Materials to avoid Oxidizing agent.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NOx). Sulfur oxides.

Sodium oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

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Product Information

(a) acute toxicity;

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--|-----------|-------------|-------------------------|
| 2-Naphthalenesulfonic acid, | | | LC50 > 5 mg/L (Rat) 4 h |
| 7,7'-(carbonyldiimino)bis[4-hydroxy-3-[[2-su | | | |
| lfo-4-[(4-sulfophenyl)azo]phenyl]azo]-, | | | |
| hexasodium salt | | | |

(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

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(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

Symptoms / effects,both acute and No information available

delayed

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effectsContains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

Persistence and Degradability

No information available

Bioaccumulative Potential No information available

| Component | log Pow | Bioconcentration factor (BCF) |
|--|---------|-------------------------------|
| 2-Naphthalenesulfonic acid, | -2.82 | No data available |
| 7,7'-(carbonyldiimino)bis[4-hydroxy-3-[[2-su | | |
| lfo-4-[(4-sulfophenyl)azo]phenyl]azo]-, | | |
| hexasodium salt | | |

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Mobility in soil No information available

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused Products

Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

SECTION 14. TRANSPORT INFORMATION

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

Special Precautions for User No special precautions required

SECTION 15. REGULATORY INFORMATION

International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component | The Inventory of Hazardous Chemicals (2015 Edition) | | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|--------------------------|--|---|------|-------|-----------|------|-----|-------|------|------|------|----------|
| 2-Naphthalenesulfonic | - | - | Х | Х | 220-027-3 | Х | Х | Х | Х | Х | Х | KE-07158 |
| acid, | | | | | | | | | | | | |
| 7,7'-(carbonyldiimino)b | | | | | | | | | | | | |
| is[4-hydroxy-3-[[2-sulfo | | | | | | | | | | | | |
| -4-[(4-sulfophenyl)azo] | | | | | | | | | | | | |
| phenyl]azo]-, | | | | | | | | | | | | |
| hexasodium salt | | | | | | | | | | | | |

National Regulations

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Prepared By Health, Safety and Environmental Department

Revision Date 01-May-2024

Revision Summary New emergency telephone response service provider.

Training Advice

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

Legend

CAS - Chemical Abstracts Service

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

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

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

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

Substances List **ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

MARPOL - International Convention for the Prevention of Pollution from Shins

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

Disclaimer

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End of Safety Data Sheet