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Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

Product Identifier

Perihalan Produk:
Product Description:

Nitrazine Yellow
Nitrazine Yellow

Cat No.: 190570000; 190570010; 190570050

**Synonyms** 2-(2,4-Dinitrophenylazo)-1-naphthol-3,6-disulfonic acid, disodium salt;

3-(2,4-Dinitrophenylazo)-4-hydroxy-2,7-naphthalenedisulfonic acid, disodium salt; C.I.

14890

**CAS No** 5423-07-4

Molecular Formula C16 H8 N4 Na2 O11 S2

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Company Thermo Fisher Scientific (M) Sdn Bhd

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# **SECTION 2: HAZARDS IDENTIFICATION**

Classification of the substance or mixture		

Label Elements

**Hazard Statements** 

#### Other Hazards

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 %	
2,7-Naphthalenedisulfonic acid, 3-[(2,4-dinitrophenyl)azo]-4-hydroxy-,	5423-07-4	100	
disodium salt			

# **SECTION 4: FIRST AID MEASURES**

Description of 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.

**Ingestion** Do NOT induce vomiting. Get medical attention.

**Inhalation** Remove from exposure, lie down. Remove to fresh air. Get medical attention immediately if

symptoms occur. If not breathing, give artificial respiration.

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.

# **SECTION 5: FIREFIGHTING MEASURES**

## Extinguishing media

## **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

## Special hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors. Dust can form an explosive mixture with air.

#### **Hazardous Combustion Products**

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

## 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**

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## Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation.

## **Environmental precautions**

See Section 12 for additional Ecological Information.

#### Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment. Avoid dust formation. Use spark-proof tools and explosion-proof equipment.

#### 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. Eliminate all ignition sources. Use explosion-proof equipment. Dust can be a fire or explosion hazard. Vacuum or sweep material and place in a disposal container. Avoid contact with skin and eyes. Do not breathe dust. Avoid contact with skin and clothing. Do not ingest. If swallowed then seek immediate medical assistance. Avoid dust formation. Do not breathe (dust, vapor, mist, gas).

## Conditions for Safe Storage, Including any Incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame.

## Specific End Uses

Use in laboratories.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control Parameters

#### **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 Wear appropriate protective gloves and clothing to prevent skin exposure

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.

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**Respiratory Protection** No protective equipment is needed under normal use conditions

**Recommended Filter type:** Particle filter

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

Solid

Information on basic physical and chemical properties

**Appearance** Red brown **Physical State** Powder Solid

Odor No information available **Odor Threshold** No data available

6.0-7.2 pН

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

Flash Point No information available Method - No information available

**Evaporation Rate** Not applicable

Flammability (solid,gas) No information available

No data available **Explosion Limits** 

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

Specific Gravity / Density No data available **Bulk Density** No data available

Water Solubility Soluble

No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

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

Not applicable **Viscosity** 

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

C16 H8 N4 Na2 O11 S2 Molecular Formula

**Molecular Weight** 542.35

# **SECTION 10: STABILITY AND REACTIVITY**

Reactivity

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None known, based on information available.

**Chemical Stability** 

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions No information available.

**Conditions to Avoid** 

Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.

Incompatible Materials

None known.

**Hazardous Decomposition Products** 

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

Sodium oxides.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

Information on Toxicological Effects

**Product Information**No acute toxicity information is available for this product

(a) acute toxicity;

OralNo data availableDermalNo data availableInhalationNo data available

(b) skin corrosion/irritation; No data available

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

(d) respiratory or skin sensitization;

**Respiratory Skin**No data available

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

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(h) STOT-single exposure: No data available

No data available (i) STOT-repeated exposure;

**Target Organs** No information available.

(j) aspiration hazard; Not applicable

Solid

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects,both acute and No information available.

delayed

**Endocrine Disrupting Properties** Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

# **SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity effects** Do not empty into drains.

Persistence and degradability

**Persistence** Soluble in water, Persistence is unlikely, based on information available.

Bioaccumulative potential Bioaccumulation is unlikely

The product is water soluble, and may spread in water systems. Will likely be mobile in the Mobility in soil

environment due to its water solubility. Highly mobile in soils.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

Other adverse effects No information available

# **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste treatment methods

Waste from Residues/Unused

**Products** 

Dispose of in accordance with local regulations

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

disposal

# **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO Not regulated

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Road and Rail Transport Not regulated

Not regulated IATA

**Special Precautions for User** No special precautions required

## **SECTION 15: REGULATORY INFORMATION**

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

International Inventories X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
2,7-Naphthalenedisulfonic acid,	226-549-8	Х	-	Х	-		Х	-	-
3-[(2,4-dinitrophenyl)azo]-4-hydrox									
y-, disodium salt									

## **National Regulations**

**Persistent Organic Pollutant Ozone Depletion Potential** 

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

Substances List

# **SECTION 16: OTHER INFORMATION**

## Legend

**CAS** - Chemical Abstracts Service

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

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

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

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

POW - Partition coefficient Octanol:Water

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

**AICS** - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

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

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Revision Date 21-Mar-2025 Revision Summary Not applicable.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

## **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 materials or in any process, unless specified in the text

**End of Safety Data Sheet**