# Thermo Fisher

# SAFETY DATA SHEET

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FSUD4140

# Dimidium bromide-disulfine blue indicator stock solution

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

产品说明: Dimidium bromide-disulfine blue indicator stock solution **Product Description:** Dimidium bromide-disulfine blue indicator stock solution

Cat No.: D/4140/05

**Supplier** UK entity/business name

Fisher Scientific UK

Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

EU entity/business name Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

Tel: 01509 231166 **Emergency Telephone Number** 

Chemtrec US: (800) 424-9300 Chemtrec EU: 001-703-527-3887

E-mail address begel.sdsdesk@thermofisher.com

**Recommended Use** Laboratory chemicals. No Information available Uses advised against

# **SECTION 2. HAZARD IDENTIFICATION**

**Physical State** Odor **Appearance** Dark blue Liquid 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. . Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

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## Dimidium bromide-disulfine blue indicator stock solution

This product does not contain any known or suspected endocrine disruptors. Toxic to terrestrial vertebrates.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %		
Ethanaminium,	129-17-9	<0.1		
N-[4-[[4-(diethylamino)phenyl](2,4-disulfophenyl)methylene]-2,5-cyclohexadien-1-yliden				
e]-N-ethyl-, inner salt, sodium salt				
Water	7732-18-5	>99.5		

#### **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**

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

# Extinguishing media which must not be used for safety reasons

No information available.

# **Specific Hazards Arising from the Chemical**

None reasonably foreseeable.

## **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.

#### **Environmental Precautions**

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

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#### Dimidium bromide-disulfine blue indicator stock solution

#### Methods for Containment and Clean Up

Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

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.

#### Storage

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

#### Specific Use(s)

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) (European standard - EN 166)

Hand Protection Protective gloves

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

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.

Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure

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

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

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

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**Environmental exposure controls** No information available.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance** Dark blue **Physical State** Liquid

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

**Melting Point/Range** 0 °C / 32 °F **Softening Point** No data available **Boiling Point/Range** 100 °C / 212 °F

Not applicable Method - No information available **Flash Point** 

**Evaporation Rate** No data available

Flammability (solid,gas) Not applicable Liquid

**Explosion Limits** No data available

No data available **Vapor Pressure** 

**Vapor Density** No data available (Air = 1.0)

Specific Gravity / Density 1.0

**Bulk Density** Not applicable Liquid

Water Solubility Miscible

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Ethanaminium. -2.783N-[4-[[4-(diethylamino)phenyl](2,4-disul

fophenyl)methylene]-2,5-cyclohexadien -1-ylidene]-N-ethyl-, inner salt, sodium

**Autoignition Temperature** 

No data available **Decomposition Temperature** No data available No data available Viscosity No information available **Explosive Properties Oxidizing Properties** No information available

## **SECTION 10. STABILITY AND REACTIVITY**

Stability Stable under normal conditions.

**Hazardous Reactions** None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Conditions to Avoid** None known.

Materials to avoid No information available.

Hazardous Decomposition Products No information available.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** 

(a) acute toxicity;

Toxicology data for the components

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#### Dimidium bromide-disulfine blue indicator stock solution

 Component
 LD50 Oral
 LD50 Dermal
 LC50 Inhalation

 Water
 -</

(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 None known.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available

delayed

## **SECTION 12. ECOLOGICAL INFORMATION**

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

degradable in waste water treatment plants.

Persistence and Degradability

Persistence Miscible with water, Persistence is unlikely, based on information available.

Bioaccumulative Potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Ethanaminium,	-2.783	No data available
N-[4-[[4-(diethylamino)phenyl](2,4-disulfoph		
enyl)methylene]-2,5-cyclohexadien-1-yliden		
e]-N-ethyl-, inner salt, sodium salt		

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

environment due to its water solubility Highly mobile in soils

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

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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

## **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)	List of dangerous goods GB 12268 - 2012	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Ethanaminium, N-[4-[[4-(diethylamino) phenyl](2,4-disulfophe nyl)methylene]-2,5-cyc lohexadien-1-ylidene]- N-ethyl-, inner salt, sodium salt		-	Х	Х	204-934-1	х	Х	х	Х	Х	X	KE-20195
Water	-	-	X	Х	231-791-2	Х	Х	Х	Х		Х	KE-35400

## **National Regulations**

# **SECTION 16. OTHER INFORMATION**

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**Revision Summary** 

SDS sections updated, 3, 4, 8, 15.

**Training Advice** 

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

#### Legend

**CAS** - Chemical Abstracts Service

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

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

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

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

Physical hazards On basis of test data **Health Hazards** Calculation method **Environmental hazards** Calculation method

#### **Disclaimer**

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**End of Safety Data Sheet**