# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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Revision Date 26-Apr-2024
Version 3

ALFAAA11838

# Arsenazo III disodium salt

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

产品说明: 偶氮砷Ⅲ二钠盐

Product Description: Arsenazo III disodium salt

Cat No. : A11838

**Synonyms** disodium salt; 2,7-Bis(2-arsenophenylazo)-1,8-dihydroxynaphtalene-3,6-disulfonic acid

**CAS No** 62337-00-2

Molecular Formula C22H16As2Na2N4O14S2

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

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

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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 StateAppearanceOdorPowder SolidDark brownOdorless

**Emergency Overview** 

Toxic if swallowed. Toxic if inhaled. Very toxic to aquatic life with long lasting effects.

# Classification of the substance or mixture

Acute Oral Toxicity	Category 3
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

# **Label Elements**



Signal Word Danger

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## Arsenazo III disodium salt

#### **Hazard Statements**

H410 - Very toxic to aquatic life with long lasting effects

H301 + H331 - Toxic if swallowed or if inhaled

## **Precautionary Statements**

## Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

#### Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P311 - Call a POISON CENTER or doctor

P330 - Rinse mouth

#### Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## **Physical and Chemical Hazards**

None identified.

## **Health Hazards**

Toxic if swallowed. Toxic if inhaled.

## **Environmental hazards**

Very toxic to aquatic life with long lasting effects.

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

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

Component	CAS No	Weight %
Disodium 3,6-bis[(O-arsonophenyl)azo]-4,5-dihydroxynaphthalene-2,7-disulphonate	62337-00-2	100

Note

Note 1: The concentration stated or, in the absence of such concentrations, the generic concentrations of this Regulation (Table 3.1) or the generic concentrations of Directive 1999/45/EC (Table 3.2), are the percentages by weight of the metallic element calculated with reference to the total weight of the mixture

# **SECTION 4. FIRST AID MEASURES**

## **General Advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

## **Eye Contact**

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

## Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately.

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## Arsenazo III disodium salt

## Most important symptoms and effects

None reasonably foreseeable.

## Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

## Notes to Physician

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

# Extinguishing media which must not be used for safety reasons

No information available.

## Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

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

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

## **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

#### **Environmental Precautions**

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

## 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. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

# 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**

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## Arsenazo III disodium salt

Component	China	Taiwan	Thailand	Hong Kong
Disodium	-	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	-
3,6-bis[(O-arsonophenyl)azo		_	_	
]-4,5-dihydroxynaphthalene-				
2,7-disulphonate				

Component	ACGIH TLV	OSHA PEL	NIOSH	The United Kingdom	European Union
Disodium				STEL: 0.3 mg/m <sup>3</sup> 15	
3,6-bis[(O-arsonophenyl)azo				min	
]-4,5-dihydroxynaphthalene-				TWA: 0.1 mg/m <sup>3</sup> 8 hr	
2,7-disulphonate				Carc. except Arsine	

## 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**

Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

## 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
١	Disposable gloves	See manufacturers	-	EN 374	(minimum requirement)
		recommendations			

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 Long sleeved clothing

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use In case of insufficient ventilation, wear suitable respiratory equipment

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted

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

Environmental exposure controls Prevent product from entering drains. Do not allow material to contaminate ground water

system. Local authorities should be advised if significant spillages cannot be contained.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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## Arsenazo III disodium salt

Solid

Solid

Appearance Dark brown Physical State Powder Solid

**Odor** Odorless

Odor Threshold No data available

рΗ

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

Vapor PressureNo data availableVapor DensityNot applicable

Specific Gravity / Density

Bulk Density

Water Solubility

Solubility in other solvents

No data available
No data available
No information available
No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature

Decomposition Temperature

Viscosity

Not applicable

Not applicable

Explosive Properties No information available Oxidizing Properties No information available

Molecular Formula C22H16As2Na2N4O14S2

Molecular Weight 820.33

# **SECTION 10. STABILITY AND REACTIVITY**

**Stability** Stable under normal conditions.

Hazardous ReactionsNone under normal processing.Hazardous PolymerizationNo information available.

Conditions to Avoid None known.

Materials to avoid No information available.

Hazardous Decomposition Products None under normal use conditions.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** 

(a) acute toxicity;

(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

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## Arsenazo III disodium salt

(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 effects**Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment. The product contains following substances which are hazardous for the

environment.

Persistence and Degradability

Degradation in sewage

treatment plant

No information available

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

Bioaccumulative Potential No information available

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

Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in

accordance with local regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Do not flush to sewer. Waste codes should be assigned by the user based on the

application for which the product was used. Do not empty into drains. Do not let this

chemical enter the environment.

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# Arsenazo III disodium salt

# **SECTION 14. TRANSPORT INFORMATION**

# **Road and Rail Transport**

UN-No UN3465

Proper Shipping Name ORGANOARSENIC COMPOUND, SOLID, N.O.S.

Technical Shipping Name Arsenazo III disodium salt

Hazard Class 6.1 Packing Group II

IMDG/IMO

UN-No UN3465

Proper Shipping Name ORGANOARSENIC COMPOUND, SOLID, N.O.S.

Technical Shipping Name Arsenazo III disodium salt

Hazard Class 6.1 Packing Group

IATA

UN-No UN3465

Proper Shipping Name ORGANOARSENIC COMPOUND, SOLID, N.O.S.

Technical Shipping Name Arsenazo III disodium salt

Hazard Class 6.1
Packing Group

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
Disodium 3,6-bis[(O-arsonophen yl)azo]-4,5-dihydroxyn aphthalene-2,7-disulph onate		-	Х	-	263-516-7	-	-	-	-		-	-

Note

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## **National Regulations**

# **SECTION 16. OTHER INFORMATION**

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## Arsenazo III disodium salt

Prepared By Health, Safety and Environmental Department

**Revision Date** 26-Apr-2024

**Revision Summary** New emergency telephone response service provider.

**Training Advice** 

Chemical incident response training.

Legend

**CAS** - Chemical Abstracts Service

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

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

Substances List

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

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

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

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

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

#### **Disclaimer**

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**End of Safety Data Sheet**