



# UNISOURCE CHEMICALS PRIVATE LIMITED

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## ARSENAZO III

### Material Safety Data Sheet

#### **1. PRODUCT IDENTIFICATION:**

**Synonyms:** 2,7-Bis(2-arsenophenylazo)-1,8-dihydroxynaphthalene-3,6-disulfonic acid

**CAS No.:** 1668-00-4

**Molecular Weight:** : 776.36

**Chemical Formula:** C<sub>22</sub>H<sub>18</sub>As<sub>2</sub>N<sub>4</sub>O<sub>14</sub>S<sub>2</sub>

#### **2. COMPOSITION, INFORMATION ON INGREDIENTS:**

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Percent</u>	<u>Hazardous</u>
Arsenazo III	1668-00-4		

#### **3. HAZARDS IDENTIFICATION:**

Toxic by inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### **4. FIRST AID MEASURES:**

First-aid personnel: ensure self-protection!

After inhalation: fresh air.

If breathing stops: immediately apply mechanical ventilation, if necessary oxygen mask.

Immediately call in physician.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water with the eyelid held wide open.

After swallowing: make victim drink plenty of water, induce vomiting. Immediately call in physician.

#### **5. FIRE FIGHTING MEASURES:**

**Suitable extinguishing media:**

Water, CO<sub>2</sub>, foam, powder.

Special risks: Combustible. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire: arsenic oxides, nitrogen oxides, sulfur oxides.

Special protective equipment for fire fighting: Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Other information:

Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

## **6. ACCIDENTAL RELEASE MEASURES:**

Person-related precautionary measures: Avoid substance contact. Avoid generation and inhalation of dusts in all circumstances. Ensure supply of fresh air in enclosed rooms.

Environmental-protection measures: Do not allow to enter sewerage system.

Procedures for cleaning / absorption: Carefully take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

## **7. HANDLING AND STORAGE:**

### **Handling:**

Notes for safe handling:

Work under hood . Do not inhale substance.

**Storage:** Tightly closed in a well-ventilated place. Accessible only for authorised persons. Dry. At +5°C to +30°C.

## **8. EXPOSURE CONTROLS, PERSONAL PROTECTION:**

### **Personal Protective Equipment**

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when dusts are generated. Filter P 3 (acc. to DIN 3181) for solid and liquid particles of toxic and very toxic substances.

Eye protection: required

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

Form: solid

Colour: dark brown

Odour: odourless

pH value at 10 g/l H<sub>2</sub>O (20 °C) ~ 2.3

Melting point not available

Boiling point not available

Ignition temperature not available

Flash point not available

Explosion limits lower not available

upper not available

Density not available

Bulk density not available

Solubility in water (20 °C) slightly soluble

## **10. STABILITY AND REACTIVITY:**

Conditions to be avoided

no information available

Substances to be avoided

no information available  
Hazardous decomposition products  
in the event of fire: See chapter 5.

## **11. TOXICOLOGICAL INFORMATION:**

Acute toxicity

Quantitative data on the toxicity of this product are not available.

Further toxicological information

The following applies to arsenic and its compounds in general: they take effect as capillary and enzyme toxins. Symptoms of arsenic poisoning: acute: after inhalation, mucosal irritations with coughing, dyspnoea, pain in the thorax. Perforations within the respiratory tract are possible. After oral uptake, gastrointestinal disorders with vomiting, diarrhoea, and spasms, CNS disorders with headache, confusion, shaking fits and disturbed consciousness, cardiovascular disorders all the way to circulatory collapse. Chronic: exanthema, dermal lesions in the form of hyperkeratosis and hypermelanosis, loss of hair, conjunctivitis and polyneuropathy, impaired hepatic function, and renal damage. After accumulation in the liver, kidneys, and skin, arsenic is eliminated from the organism only slowly. Experience has shown arsenic compounds to be carcinogenic in man.

The following applies to azo dyes in general: azo dyes containing a carcinogenic aryl amine component are suspected of possessing a carcinogenic potential. It is therefore recommended that the substance be handled as if it possessed the properties of the basic amine.

*Further data*

The product should be handled with the care usual when dealing with chemicals.

## **12. ECOLOGICAL INFORMATION:**

Ecotoxic effects: Quantitative data on the ecological effect of this product are not available.

Biological effects: Highly toxic for aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

Further ecologic data: The following applies to arsenic compounds in general:

biological effects: fish: toxic as from 1.1 mg/l ; organic As compounds 96 h. TLm: < 1 mg/l; inorganic As compounds: LC50: 1 mg/l/96 h. TLm: < 1 mg/l; tolerable values for fresh-water organisms below 0,44 mg/l, for seawater organisms below 0.508 mg/l; distribution; bioaccumulation in tissues. Hazard for drinking water. Depending on the concentration, nitrogen compounds may contribute to the eutrophication of water supplies. Do not allow to enter waters, waste water, or soil!

## **13. DISPOSAL CONSIDERATIONS:**

**Product:**

Chemicals must be disposed of in compliance with the respective national regulations. Under [www.retrologistik.de](http://www.retrologistik.de) you will find country- and substance-specific information as well as contact partners.

**Packaging:**

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under [www.retrologistik.de](http://www.retrologistik.de) you will find special information on the respective national conditions as well as contact partners.

#### **14. TRANSPORT INFORMATION:**

Road & Rail ADR, RID

UN 3465 ORGANISCHE ARSENVERBINDUNG, FEST, N.A.G. (ARSENAZO III), 6.1, II  
Inland waterway ADN, ADNR not tested Sea IMDG-Code

UN 3465 ORGANOARSENIC COMPOUND, SOLID, N.O.S. (ARSENAZO III), 6.1, II  
Ems F-A S-A

Air CAO, PAX

UN 3465 ORGANOARSENIC COMPOUND, SOLID, N.O.S. (ARSENAZO III), 6.1, II

The transport regulations are cited according to international regulations and in the form applicable in Germany . Possible national deviations in other countries are not considered.

#### **15. REGULATORY INFORMATION:**

Labelling according to EC Directives

Symbol: T Toxic N Dangerous for the environment

R-phrases: 23/25-50/53 Toxic by inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases: 20/21-28-45-60-61 When using do not eat, drink or smoke. After contact with skin, wash immediately with plenty of water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/Safety data sheets.

EC-No.: 216-788-6 EC label

*Reduced labelling (1999/45/EC, Art.10,4)*

Symbol: T Toxic N Dangerous for the environment

R-phrases: 23/25 Toxic by inhalation and if swallowed.

S-phrases: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

#### **16. DISCLAIMER INFORMATION:**

##### **DISCLAIMER:**

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