

ALFAAL06057

## 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

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

产品说明:	4-二甲氨基偶氮苯-4'-磺酰氯
Product Description:	4-Dimethylaminoazobenzene-4'-sulfonyl chloride
Cat No. :	<b>L06057</b>
CAS No	56512-49-3
Molecular Formula	C14 H14 CI N3 O2 S
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 <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11 Emergency Number <b>US:</b> 001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99 <b>CHEMTREC</b> Tel. No. <b>US:</b> 001-800-424-9300 / <b>Europe:</b> 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 St	ate
Solid Crystal	line

Appearance Dark red Odor No information available

**Emergency Overview** 

Causes severe skin burns and eye damage. Moisture sensitive.

### Classification of the substance or mixture

Skin Corrosion/Irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1

### Label Elements



Signal Word

Danger

Hazard Statements

H314 - Causes severe skin burns and eye damage

### 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

### **Precautionary Statements**

### Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective gloves/protective clothing/eye protection/face protection Response P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsina P310 - Immediately call a POISON CENTER or doctor P362 + P364 - Take off contaminated clothing and wash it before reuse Storage P403 + P233 - Store in a well-ventilated place. Keep container tightly closed Disposal P501 - Dispose of contents/ container to an approved waste disposal plant **Physical and Chemical Hazards** 

#### None identified. Health Hazards

Corrosive. Causes skin and eye burns. 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.

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

Component	CAS No	Weight %
Benzenesulfonyl chloride, 4-[[4-(dimethylamino)phenyl]azo]-	56512-49-3	<=100

### SECTION 4. FIRST AID MEASURES

### **General Advice**

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

### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.

### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.

### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately. 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.

### Ingestion

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.

### Most important symptoms and effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

### 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

### Self-Protection of the First Aider

No special precautions required.

### **Notes to Physician**

Treat symptomatically.

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

### Suitable Extinguishing Media

Dry sand. Carbon dioxide (CO 2). Powder. Do not use water or foam. CO 2, dry chemical, dry sand, alcohol-resistant foam.

#### Extinguishing media which must not be used for safety reasons No information available.

No information available.

### Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes.

### **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**

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

#### **Environmental Precautions**

Should not be released into the environment. Do not allow material to contaminate ground water system. See Section 12 for additional Ecological Information.

### 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. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.

### Storage

Keep refrigerated. Corrosives area. 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**

### 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

### 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

### inhalable dust

### Exposure Controls

### Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. 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	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)
	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 <b>Recommended Filter type:</b> Acid gases filter
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	No information available.

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

Appearance Physical State	Dark red Solid Crystalline	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	No information available No data available No information available ~ 185 °C / 365 °F No data available No information available No information available Not applicable No information available No data available	(with decomposition) <b>Method -</b> No information available Solid
Vapor Pressure Vapor Density	No data available Not applicable	Solid

Molecular Weight

## SAFETY DATA SHEET

### 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

Solid

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/wate	er)
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	Not applicable
Explosive Properties	No information available
Oxidizing Properties	No information available
Molecular Formula	C14 H14 CI N3 O2 S

323.80

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

Stability	Moisture sensitive.
Hazardous Reactions Hazardous Polymerization	None under normal processing. No information available.
Conditions to Avoid	None known.
Materials to avoid	Strong bases. Oxidizing agent.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx). Sulfur oxides. Hydrogen chloride.

SECTION 11. TOXICOLOGICAL INFORMATION

## Product Information

- (b) skin corrosion/irritation; Category 1 B
- (c) serious eye damage/irritation; Category 1
- (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

### 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

	4-Dimethylaminoazobenzene-4'-sulfonyl chloride
Target Organs	No information available.
(j) aspiration hazard;	Not applicable Solid
Symptoms / effects,both acute and delayed	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
	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	No information available
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	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	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 flush to sewer. Large amounts will affect pH and harm aquatic organisms.
	SECTION 14. TRANSPORT INFORMATION
Road and Rail Transport	
UN-No Proper Shipping Name Technical Shipping Name Hazard Class Packing Group	UN3261 Corrosive solid, acidic, organic, n.o.s. (4-Dimethylaminoazobenzene-4'-sulfonyl chloride) 8 II
IMDG/IMO	
UN-No Proper Shipping Name Technical Shipping Name Hazard Class	UN3261 Corrosive solid, acidic, organic, n.o.s. (4-Dimethylaminoazobenzene-4'-sulfonyl chloride) 8

8 П

Hazard Class

**Packing Group** 

### 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

### <u>IATA</u>

UN-No	UN3261
Proper Shipping Name	Corrosive solid, acidic, organic, n.o.s.
Technical Shipping Name	(4-Dimethylaminoazobenzene-4'-sulfonyl chloride)
Hazard Class	8
Packing Group	II

**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)	goods GB	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Benzenesulfonyl chloride, 4-[[4-(dimethylamino)p henyl]azo]-	-	-	Х	-	260-235-1	-	-	-	-		х	-

### National Regulations

### **SECTION 16. OTHER INFORMATION**

Prepared By
Revision Date
Revision Summary

Health, Safety and Environmental Department 03-May-2024 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 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 Substances List **PICCS** - Philippines Inventory of Chemicals and Chemical Substances **ENCS** - Japanese Existing and New Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances AICS - Australian Inventory of Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances NZIOC - New Zealand Inventory of Chemicals WEL - Workplace Exposure Limit TWA - Time Weighted Average ACGIH - American Conference of Governmental Industrial Hygienists IARC - International Agency for Research on Cancer **DNEL** - Derived No Effect Level PNEC - Predicted No Effect Concentration RPE - Respiratory Protective Equipment LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration POW - Partition coefficient Octanol:Water

PBT - Persistent, Bioaccumulative, Toxic

Page 7

vPvB - very Persistent, very Bioaccumulative

### 4-Dimethylaminoazobenzene-4'-sulfonyl chloride

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

### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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)

### 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**