

ALFAAL15613

# 2,3-Dihydro-1H-benz[de]isoquinoline

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

产品说明:	2,3-二氢-1H-苯并[de]异喹啉
Product Description:	2,3-Dihydro-1H-benz[de]isoquinoline
Cat No. :	<b>L15613</b>
Molecular Formula	C12 H11 N
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 State	Appearance	Odor
Solid Crystalline	Brown	No information available
	<b>Emergency Overview</b> Causes severe skin burns and eye damage.	

#### 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

#### 2,3-Dihydro-1H-benz[de]isoquinoline

#### 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 rinsing

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. Is not likely mobile in the environment due its low water solubility. Will likely be mobile in the environment due to its volatility. Spillage unlikely to penetrate soil. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

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

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

Component	CAS No	Weight %
2,3-Dihydro-1H-benz[de]isoquinoline	22817-26-1	<=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

#### 2,3-Dihydro-1H-benz[de]isoquinoline

#### 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

CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

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

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

#### Specific Use(s)

Use in laboratories

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

#### Monitoring methods

#### 2,3-Dihydro-1H-benz[de]isoquinoline

MDHS70 General methods for sampling airborne gases and vapours 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 MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

#### 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	Protectiv	e gloves		
<b>Glove material</b> Nitrile rubber Neoprene Natural rubber	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)

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	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	Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced <b>Recommended Filter type:</b> Particulates filter conforming to EN 143
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. <b>Recommended half mask:-</b> Particle filtering: EN149:2001 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	Brown
Physical State	Solid Crystalline
Odor	No information available
Odor Threshold	No data available
pH	No information available
Melting Point/Range	98 - 104 °C / 208.4 - 219.2 °F
Softening Point	No data available
Boiling Point/Range	120 °C / 248 °F

#### 2,3-Dihydro-1H-benz[de]isoquinoline

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 Pressure	No data available	
Vapor Density	Not applicable	Solid
Specific Gravity / Density	No data available	
Bulk Density	No data available	
Water Solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/wat	er)	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	Not applicable	Solid
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Molecular Formula	C12 H11 N	
Molecular Weight	169.23	

### SECTION 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	None under normal processing. No 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; Category 1 B
- (c) serious eye damage/irritation; Category 1
- (d) respiratory or skin sensitization;<br/>Respiratory<br/>SkinNo data available<br/>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	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 Persistence	Insoluble in water, Persistence is unlikely, based on information available.	
Bioaccumulative Potential	May have some potential to bioaccumulate	
Mobility in soil	Spillage unlikely to penetrate soil The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Is not likely mobile in the environment due its low water solubility Will likely be mobile in the environment due to its volatility	
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	UN3259
Proper Shipping Name	AMINES, SOLID, CORROSIVE, N.O.S.
Technical Shipping Name	(2,3-Dihydro-1H-benz[de]isoquinoline)
Hazard Class	8
Packing Group	

#### IMDG/IMO

UN-No	UN3259
Proper Shipping Name	AMINES, SOLID, CORROSIVE, N.O.S.
Technical Shipping Name	(2,3-Dihydro-1H-benz[de]isoquinoline)
Hazard Class	8
Packing Group	III
IATA	
UN-No	UN3259
Proper Shipping Name	AMINES, SOLID, CORROSIVE, N.O.S.*
Technical Shipping Name	(2,3-Dihydro-1H-benz[de]isoquinoline)
Hazard Class	8
Packing Group	III
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).

National Regulations

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

Prepared By	
Revision Date	
Revision Summary	

Health, Safety and Environmental Department 08-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.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

#### Legend

CAS - Chemical Abstracts Service	<b>TSCA</b> - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical 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	DSL/NDSL - Canadian Domestic Substances List/Non-Domestic         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%	<ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>PNEC - Predicted No Effect Concentration</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> </ul>

2,3-Dihydro-1H-benz[de]isoquinoline

**NOEC** - No Observed Effect Concentration **PBT** - Persistent, Bioaccumulative, Toxic

**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)

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

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