

ALFAAL13505

# 2-Fluoro-1,4-dimethoxybenzene

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

产品说明:	1,4-二甲氧基-2-氟苯
Product Description:	2-Fluoro-1,4-dimethoxybenzene
Cat No. :	<b>L13505</b>
CAS No	82830-49-7
Molecular Formula	C8 H9 F O2
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
Solid	k

Appearance White Odor Odorless

**Emergency Overview** 

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

### Classification of the substance or mixture

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity - (single exposure)	Category 3

#### Label Elements



Signal Word

Warning

**Hazard Statements** 

# H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

#### **Precautionary Statements**

#### Prevention

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

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

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

P312 - Call a POISON CENTER or doctor if you feel unwell

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

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

#### **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. Spillage unlikely to penetrate soil.

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

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
1,4-Dimethoxy-2-fluorobenzene	82830-49-7	99

# **SECTION 4. FIRST AID MEASURES**

#### Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### **Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. Take off contaminated clothing and shoes immediately.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.

#### Ingestion

Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.

#### Most important symptoms and effects

No information available.

#### 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**

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

#### **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.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

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

Avoid contact with skin and eyes. Avoid contact with skin and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance. Wash thoroughly after handling.

#### Storage

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

#### 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 inhalable dust

# Exposure Controls

#### **Engineering Measures**

Ventilation systems. 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 Nitrile rubber Neoprene Natural rubber PVC	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)			
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
<b>Respiratory Protection</b>	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
Small scale/Laboratory use	Maintain adequate ventilation
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	White Solid	
Odor	Odorless	
Odor Threshold	No data available	
pH	No information available	
Melting Point/Range	23 - 26 °C / 73.4 - 78.8 °F	
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	5010
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	

# 2-Fluoro-1,4-dimethoxybenzene

Water Solubility	Insoluble	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/v	vater)	
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	C8 H9 F O2	
Molecular Weight	156.16	

# **SECTION 10. STABILITY AND REACTIVITY**

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	No information available. No information available.
Conditions to Avoid	Incompatible products.
Materials to avoid	Strong oxidizing agents.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors.

	SECTION 11. TOXICOLOGICAL INFORMATION
Product Information (a) acute toxicity;	No acute toxicity information is available for this product
(b) skin corrosion/irritation;	Category 2
(c) serious eye damage/irritation;	Category 2
(d) respiratory or skin sensitization Respiratory Skin	; No data available 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;	Category 3
Results / Target organs	Respiratory system
(i) STOT-repeated exposure;	No data available
Target Organs	No information available.

2-Fluoro-1,4-dimethoxybenzene

(i) aspiration hazard;       Not applicable Solid         Symptoms / effects,both acute and delayed       No Information available         Ecotoxicity effects       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.         Bioaccumulative Potential       May have some potential to bioaccumulate         Mobility in soil       Spillage unlikely to penetrate soil is not likely mobile in the environment due its low water solubility         Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential       This product does not contain any known or suspected audocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance 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       Waste is classified as hazardous. Dispose of in accordance with hiccal regulations.         Other Information       Waste codes should be assigned by the user based on the application for which the produc was used. Do not empty into drains.         Denot emp		
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       Insoluble in water.         Bioaccumulative Potential       May have some potential to bioaccumulate         Mobility in soil       Spillage unlikely to penetrate soil is not likely mobile in the environment due its low water solubility         Endocrine Disruptor Information Product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance         Variation Potential       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.         Ecotoxicity       Section 14. TRANSPORT INFORMATION         Road and Rail Transport.       Not regulated         MDG/IMO.       Not regulated         Mate       Not special precautions required	(j) aspiration hazard;	
Ecotoxicity effects       Contains no substances known to be hazardous to the environment or that are not degradability persistence         Persistence       Insoluble in water.         Bioaccumulative Potential       May have some potential to bioaccumulate         Mobility in soil       Spillage unlikely to penetrate soil 1s not likely mobile in the environment due its low water solubility         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         Section 13. DISPOSAL CONSIDERATIONS       Waste is classified as hazardous. Dispose of in accordance with local regulations.         Contaminated Packaging       Dispose of this container to hazardous or special waste collection point.         Other Information       Waste is classified as hazardous. 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.         Section 14. TRANSPORT INFORMATION       Road and Rail Transport.         Not regulated       Not regulated         IMDS/IMO       Not regulated		No information available
degradable in waste water treatment plants.         Persistence       Insoluble in water.         Bioaccumulative Potential       May have some potential to bioaccumulate         Mobility in soil       Spillage unlikely to penetrate soil. Is not likely mobile in the environment due its low water solubility         Endocrine Disruptor Information Persistent Organic Pollutant Oxganic Pollutant Oxganic Pollutant       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 This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product substance This product does not contain any known or suspected substance This product substance This product does not contain any known or suspected substance This product substance This product does not contain any known or suspected substance This product substance This product does not contain any known or suspected substance This product substance Suspected Substance This product does not contain to hazardous. Dispose of in accordance with the European Directives on waste and hazardous vaste. Dispose of in accordance with tocal regulations.		SECTION 12. ECOLOGICAL INFORMATION
Persistence       Insoluble in water.         Bioaccumulative Potential       May have some potential to bioaccumulate         Mobility in soil       Spillage unlikely to penetrate soil. Is not likely mobile in the environment due its low water solubility         Endocrine Disruptor Information Persistent Organic Pollutant O	Ecotoxicity effects	
Mobility in soil       Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility         Endocrine Disruptor Information Persistent Organic Pollutant Organic Pollutant Organic Pollutant Organic Pollutant This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance         Waste from Residues/Unused Product Jose of this container to hazardous. Dispose of in accordance with local regulations.       Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.         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.         Section 14. TRANSPORT INFORMATION       Road and Rail Transport.         Not regulated       Not regulated         IATA       Not regulated		Insoluble in water.
solubility         Endocrine Disruptor Information         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       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.         SECTION 14. TRANSPORT INFORMATION         Road and Rail Transport.       Not Regulated         IMDG/IMO       Not regulated         Special Precautions for User       No special precautions required	Bioaccumulative Potential	May have some potential to bioaccumulate
Persistent Organic Pollutant Ozone Depletion Potential       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.         Road and Rail Transport       Not Regulated         IMDG/IMO       Not regulated         IATA_       No special precautions required	Mobility in soil	
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.         Example:       SECTION 14. TRANSPORT INFORMATION         Road and Rail Transport       Not Regulated         IMDG/IMO       Not regulated         Special Precautions for User       No special precautions required	Persistent Organic Pollutant	This product does not contain any known or suspected substance
Products       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.         Example       SECTION 14. TRANSPORT INFORMATION         Road and Rail Transport       Not Regulated         IMDG/IMO       Not regulated         Special Precautions for User       No special precautions required		SECTION 13. DISPOSAL CONSIDERATIONS
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.         Impose the second secon		
was used. Do not empty into drains.         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	Contaminated Packaging	Dispose of this container to hazardous or special waste collection point.
Road and Rail Transport     Not Regulated       IMDG/IMO     Not regulated       IATA     Not regulated       Special Precautions for User     No special precautions required	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.
IMDG/IMO       Not regulated         IATA       Not regulated         Special Precautions for User       No special precautions required		SECTION 14. TRANSPORT INFORMATION
IATA     Not regulated       Special Precautions for User     No special precautions required	Road and Rail Transport	Not Regulated
Special Precautions for User No special precautions required	IMDG/IMO_	Not regulated
-	IATA	Not regulated
SECTION 15. REGULATORY INFORMATION	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).

### 2-Fluoro-1,4-dimethoxybenzene

	The Inventory of Hazardous Chemicals		TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
	(2015 Edition)	2012										
1,4-Dimethoxy-2-fluoro benzene	-	-	Х	-	-	-	-	-	-		-	-

#### **National Regulations**

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

Prepared By	
Revision Date	
Revision Summary	

Health, Safety and Environmental Department 25-Apr-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

<ul> <li>CAS - Chemical Abstracts Service</li> <li>EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances</li> <li>PICCS - Philippines Inventory of Chemicals and Chemical Substances</li> <li>IECSC - Chinese Inventory of Existing Chemical Substances</li> <li>KECL - Korean Existing and Evaluated Chemical Substances</li> </ul>	TSCA - United States Toxic Substances Control Act Section 8(b) Inventory al 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% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic	<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> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul>
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 The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the

2-Fluoro-1,4-dimethoxybenzene

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