# Thermo Fisher SCIENTIFIC

## SAFETY DATA SHEET

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ALFAAH30991

## 3-Fluoro-6-methoxypyridine

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

产品说明: 5-氟-2-甲氧基吡啶

Product Description: 3-Fluoro-6-methoxypyridine

 Cat No.:
 H30991

 CAS No
 51173-04-7

 Molecular Formula
 C6 H6 F N O

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 US call: 001-800-227-6701 / Europe call: +32 14 57 52 11

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 StateAppearanceOdorLiquidColorlessCharacteristic

## **Emergency Overview**

Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

#### Classification of the substance or mixture

Flammable liquids.	Category 3
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

## 3-Fluoro-6-methoxypyridine

#### **Hazard Statements**

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

## **Precautionary Statements**

#### Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P240 - Ground and bond container and receiving equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

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

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

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

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

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**

Flammable liquid. Vapors may cause flash fire or explosion.

#### **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.

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

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

Component	CAS No	Weight %
3-Fluoro-6-methoxypyridine	51173-04-7	<=100

#### **SECTION 4. FIRST AID MEASURES**

#### **General Advice**

If symptoms persist, call a physician.

#### **Eve Contact**

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

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water.

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## 3-Fluoro-6-methoxypyridine

Most important symptoms and effects

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

#### 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**

Water mist may be used to cool closed containers.

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

No information available.

## **Specific Hazards Arising from the Chemical**

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Combustible material.

## **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.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

## **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

## Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

#### Storage

Store in freezer. Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place.

#### Specific Use(s)

Use in laboratories

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## 3-Fluoro-6-methoxypyridine

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#### **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. MDHS70 General methods for sampling airborne gases and vapours MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography 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. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. 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 Neoprene Natural rubber PVC	See manufacturers recommendations	-	EN 374	(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	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> Organic gases and vapours filter Type A Brown conforming to EN14387
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.  Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141  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**

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Method - No information available

## 3-Fluoro-6-methoxypyridine

Appearance Colorless

Physical State Liquid

Odor Characteristic
Odor Threshold No data available

pHNo information availableMelting Point/RangeNo data availableSoftening PointNo data available

Boiling Point/Range No information available Flash Point < 60 °C / < 140 °F

Evaporation Rate No data available
Flammability (solid.gas) Not applicable Liquid

Flammability (solid,gas)

Explosion Limits

Not applicable

No data available

Vapor Pressure No data available

Vapor Density No data available (Air = 1.0)

Specific Gravity / Density

Bulk Density

No data available

Not applicable

Liquid

Water Solubility No information available Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature

Decomposition Temperature

Viscosity

No data available
No data available
No data available

**Explosive Properties** explosive air/vapour mixtures possible

Oxidizing Properties No information available

Molecular FormulaC6 H6 F N OMolecular Weight127.12

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

**Stability** Stable under normal conditions.

Hazardous Reactions
Hazardous Polymerization
None under normal processing.
No information available.

**Conditions to Avoid** Keep away from open flames, hot surfaces and sources of ignition.

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 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

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## 3-Fluoro-6-methoxypyridine

(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

No data available (i) STOT-repeated exposure;

No information available. **Target Organs** 

No data available (j) aspiration hazard;

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

## **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.

No information available Persistence and Degradability

No information available **Bioaccumulative Potential** 

No information available Mobility in soil

**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. Empty containers

retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and

empty container away from heat and sources of ignition.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with

local regulations.

## **SECTION 14. TRANSPORT INFORMATION**

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## 3-Fluoro-6-methoxypyridine

#### **Road and Rail Transport**

**UN-No** UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Technical Shipping Name (3-Fluoro-6-methoxypyridine)

Hazard Class 3 Packing Group III

## IMDG/IMO

**UN-No** UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Technical Shipping Name (3-Fluoro-6-methoxypyridine)

Hazard Class 3
Packing Group III

#### IATA

**UN-No** UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Technical Shipping Name (3-Fluoro-6-methoxypyridine)

Hazard Class 3
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 Health, Safety and Environmental Department

Revision Date 04-May-2024

**Revision Summary** 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

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

Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances ENCS - Japanese Existing and New Chemical Substances

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## 3-Fluoro-6-methoxypyridine

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

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

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

**AICS** - Australian Inventory of Chemical Substances **NZIOC** - New Zealand Inventory of Chemicals

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

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 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**