# Thermo Fisher

## SAFETY DATA SHEET

Page 1 / 8 Creation Date 08-Nov-2010 Revision Date 05-Apr-2024 Version 5

ACR11917

## **Fluoranthene**

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

产品说明: 荧蒽

Product Description: Fluoranthene

Cat No.: 119170000; 119170250; 119171000; 119175000

Synonyms Benzo[j,k]fluorene

CAS No 206-44-0 Molecular Formula C16 H10

Supplier UK entity/business name

Fisher Scientific UK Bishop Meadow Road,

Loughborough, Leicestershire LE11 5RG, United Kingdom

**EU entity/business name** Thermo Fisher Scientific

Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

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 StateAppearanceOdorPowder SolidLight greenOdorless

**Emergency Overview** 

Harmful to aquatic life. Very toxic to aquatic life with long lasting effects. Harmful if swallowed. May be harmful in contact with skin.

### Classification of the substance or mixture

Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 5
Acute aquatic toxicity	Category 1 Category 3
Chronic aquatic toxicity	Category 1

## **Label Elements**



Page 2/8 Revision Date 05-Apr-2024

## **Fluoranthene**

## Signal Word

## Warning

### **Hazard Statements**

H410 - Very toxic to aquatic life with long lasting effects

H302 - Harmful if swallowed

H313 - May be harmful in contact with skin

## **Precautionary Statements**

#### Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves

#### Response

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

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

P330 - Rinse mouth

### Storage

P403 - Store in a well-ventilated place

#### Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## **Physical and Chemical Hazards**

None identified.

#### **Health Hazards**

Harmful if swallowed. May be harmful in contact with skin.

#### **Environmental hazards**

Harmful to aquatic life. Very toxic to aquatic life with long lasting effects. .

Toxic to terrestrial vertebrates. This product does not contain any known or suspected endocrine disruptors.

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

Component	CAS No	Weight %
Fluoranthene	206-44-0	>95

## **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. Get medical attention if symptoms occur.

## Most important symptoms and effects

None reasonably foreseeable.

#### 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.

Page 3/8 Revision Date 05-Apr-2024

## Fluoranthene

## **Notes to Physician**

Treat symptomatically.

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

## Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

#### 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.

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

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

## **Environmental Precautions**

Should not be released into the environment.

## Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

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

#### Handling

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

#### 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**

## **Exposure Controls**

## **Engineering Measures**

Ensure adequate ventilation, especially in confined areas. 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.

Page 4/8 Revision Date 05-Apr-2024

## **Fluoranthene**

Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

Breakthrough time Glove thickness **EU** standard **Glove comments** Glove material EN 374 Disposable gloves See manufacturers (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

When workers are facing concentrations above the exposure limit they must use **Respiratory Protection** 

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

(Air = 1.0)

and maintained properly

In case of insufficient ventilation, wear suitable respiratory equipment Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure Small scale/Laboratory use

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.

No information available. **Environmental exposure controls** 

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

Liaht areen **Appearance Physical State** Powder Solid

Odorless Odor

**Odor Threshold** No data available Not applicable pН

**Melting Point/Range** 109 - 111 °C / 228.2 - 231.8 °F

**Softening Point** No data available **Boiling Point/Range** 384 °C / 723.2 °F

**Flash Point** Not applicable Method - No information available

**Evaporation Rate** No data available No information available Flammability (solid,gas) No data available **Explosion Limits** 

**Vapor Pressure** No data available **Vapor Density** No data available

Specific Gravity / Density No data available **Bulk Density** No data available

**Water Solubility** Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

log Pow Component

Fluoranthene 5.1

**Autoignition Temperature** No data available **Decomposition Temperature** No data available **Viscosity** No data available

Page 5 / 8 Revision Date 05-Apr-2024

## **Fluoranthene**

Explosive Properties No information available Oxidizing Properties No information available

Molecular FormulaC16 H10Molecular Weight202.25

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

**Stability** Stable under normal conditions.

Hazardous Reactions None under normal processing.

**Hazardous Polymerization** No information available.

Conditions to Avoid Incompatible products.

Materials to avoid Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2).

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Product Information No acute toxicity information is available for this product

(a) acute toxicity;

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation			
Fluoranthene	LD50 = 2 g/kg (Rat)	LD50 = 3180 mg/kg (Rabbit)				

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(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; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Page 6/8 Revision Date 05-Apr-2024

#### **Fluoranthene**

Other Adverse Effects

The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information

Symptoms / effects,both acute and No information available

delayed

## **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects** 

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

	Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Ī	Fluoranthene	Oncorhynchus mykiss:	EC50: 0.78 mg/L 20h		
١		LC50=0.0077 mg/L 96h			

Persistence and Degradability

Expected to be biodegradable

**Bioaccumulative Potential** 

No information available

Component	log Pow	Bioconcentration factor (BCF)
Fluoranthene	5.1	No data 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** 

Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

**Contaminated Packaging** Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

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

was used.

## **SECTION 14. TRANSPORT INFORMATION**

## **Road and Rail Transport**

**UN-No** UN3077

**Proper Shipping Name** 

Environmentally hazardous substances, solid, n.o.s.

**Technical Shipping Name** Fluoranthene

**Hazard Class Packing Group** 

9 Ш

#### IMDG/IMO

**UN-No** UN3077

**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.

9

**Technical Shipping Name** Fluoranthene

**Hazard Class** 

**Page** 7/8 Revision Date 05-Apr-2024

#### **Fluoranthene**

**Packing Group** Ш

**IATA** 

UN3077 **UN-No** 

**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.

**Technical Shipping Name** Fluoranthene

**Hazard Class Packing Group** Ш

**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	List of	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	<b>ENCS</b>	ISHL	AICS	KECL
	Inventory of Hazardous Chemicals (2015 Edition)											
Fluoranthene	Х	-	Х	Х	205-912-4	Χ	-	-	Х	Х	Х	-

## **National Regulations**

## **SECTION 16. OTHER INFORMATION**

**Creation Date** 08-Nov-2010 **Revision Date** 05-Apr-2024 **Revision Summary** Not applicable.

#### **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 **AICS** - Australian Inventory of Chemical Substances

IECSC - Chinese Inventory of Existing 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 **DNEL** - Derived No Effect Level

IARC - International Agency for Research on Cancer PNEC - Predicted No Effect Concentration

RPE - Respiratory Protective Equipment

LD50 - Lethal Dose 50%

LC50 - Lethal Concentration 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water

NOEC - No Observed Effect Concentration

vPvB - very Persistent, very Bioaccumulative

PBT - Persistent, Bioaccumulative, Toxic

ACR11917

## SAFETY DATA SHEET

Page 8 / 8 Revision Date 05-Apr-2024

## **Fluoranthene**

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

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**End of Safety Data Sheet**