

1 Identification

· **Product identifier**

· **Trade name:** ***ETD Consumable Kit***
Disposable Reactant Cartridge

· **Article number:** 8243459

· **CAS Number:**
206-44-0

· **EC number:**
205-912-4

· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
Bruker Daltonik GmbH
Fahrenheitstrasse 4
D-28359 Bremen / Germany
Tel.: +49(421) 2205-0
Fax : +49(421) 2205-100
E-mail: care@bdal.de

· **Information department:**

Bruker Daltonik GmbH
Tel.: +49 (421) 2205-240

· **Emergency telephone number:**

Tel.: +49 (361)730730
Gemeinsames Giftinformationszentrum (GGIZ) (Poison Control Center)

USA

National Capital Poison Center, +1 202 362 3867

2 Hazard(s) identification

· **Classification of the substance or mixture**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R22: Harmful if swallowed.



N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

· **Label elements**

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

fluoranthene

· **Hazard statements**

Harmful if swallowed.

· **Precautionary statements**

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system**

· **NFPA ratings (scale 0-4)**



Health = 1

Fire = 1

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description:**

206-44-0 fluoranthene

· **Identification number(s):**

· **EC number:** 205-912-4

4 First-aid measures

· **Description of first aid measures**

· **General information** Immediately remove any clothing soiled by the product.

· **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact**

Immediately wash with water and soap and rinse thoroughly.

Seek medical advice.

· **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing**

Rinse the mouth with water immediately

Immediately call a doctor.

· **Information for doctor** No particular measures are known - treat according to symptoms.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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· **Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
 CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**
 During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
 Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
 Cool endangered receptacles with water spray.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 Wear protective equipment. Keep unprotected persons away.
 Ensure adequate ventilation
 Avoid contact with eyes and skin.
 Avoid formation of dust.
 Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:**
 Do not allow product to reach sewage system or any water course.
 Do not allow to penetrate the ground/soil.
- **Methods and material for containment and cleaning up:**
 Pick up mechanically.
 Avoid causing dust.
- **Reference to other sections**
 Clean the accident area carefully.
 See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
 Ensure good ventilation/exhaustion at the workplace.
 Avoid contact with the eyes and skin.
 Prevent formation of dust.
 Keep eye irrigation utensils (bottle) ready for use at place of work.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 Store only in the original receptacle.
 Protect from dampness and humidity.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
 Store in cool, dry conditions in well sealed receptacles.
 Store receptacle in a well ventilated area.

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· **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 - Keep away from foodstuffs, beverages and feed.
 - Do not eat, drink, smoke or sniff while working.
 - Wash hands before breaks and at the end of work.
 - Immediately remove all soiled and contaminated clothing
 - Store protective clothing separately.
- **Breathing equipment:**
 - If dust is produced.
 - Short term filter device:
 - Filter P1.
- **Protection of hands:**



Only use chemical-protective gloves with CE-labeling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
 - Nitrile rubber, NBR
 - Butyl rubber, BR
 - Fluorocarbon rubber (Viton)
 - PVC gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **As protection from splashes gloves made of the following materials are suitable:** PVC gloves
- **Eye protection:**



Tightly sealed goggles.

- **Body protection:** Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form:** Crystalline

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Color:	Yellow
Odor:	Not determined
	-
Change in condition	
Melting point/Melting range:	105 - 110 °C (221 - 230 °F) (lit.)
Boiling point/Boiling range:	384 °C (723 °F) (lit.)
Flash point:	198 °C (388 °F) (closed cup)
Flammability (solid, gaseous)	Product is not flammable.
Danger of explosion:	Product does not present an explosion hazard.
Density:	Not determined
Solubility in / Miscibility with	
Water:	Insoluble
Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** strong oxidizing agents
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

206-44-0 fluoranthene

Oral	LD50	2000 mg/kg (rat)
Dermal	LD50	3180 mg/kg (rab)

- **Primary irritant effect:**
- **on the skin:** irritant effect on skin and mucous membranes possible.
- **on the eye:** irritative effect possible
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**
- **Carcinogenic toxicity**
- **IARC:** 3
- **Not classifiable as to carcinogenicity to humans**
- **Mutagenic toxicity**
- **Laboratory experiments have shown mutagenic effects**
- **Additional toxicological information:**
- **Harmful if swallowed.**
- **Possibly harmful by inhalation and harmful if absorbed through the skin.**
- **Warning, substance not yet fully tested**

- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

206-44-0 fluoranthene

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· **NTP (National Toxicology Program)**

Substance is not listed.

12 Ecological information

· **Toxicity**· **Aquatic toxicity:**

206-44-0 fluoranthene

Daphnientoxizität	0.78 mg/l (Daphnia magna) (EC50 (20h))
EC50 (3d)	>0.005 - < 0.01 mg/l (Daphnia magna)
Fischtoxizität	0.0077 mg/l (Onchorhynchus mykiss) (LC50 (96h))
	560 mg/l (Cyprinodon variegatus) (NOEC (96h))
NOEC	(48h) 0.085 mg/l (Daphnia magna)

· **Persistence and degradability** No further relevant information available.· **Behavior in environmental systems:**· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **Ecotoxicological effects:** Not determined· **Remark:** Very toxic for fish· **Additional ecological information:**· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**· **Recommendation** Must be specially treated adhering to official regulations.· **Uncleaned packagings:**· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**· **DOT, ADR, IMDG, IATA**

UN3077

· **UN proper shipping name**· **IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (fluoranthene), MARINE POLLUTANT· **IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (fluoranthene)

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· **Transport hazard class(es)**· **DOT**· **Class**

9 Miscellaneous dangerous substances and articles.

· **ADR, IMDG, IATA**· **Class**

9 Miscellaneous dangerous substances and articles

· **Label**

9

· **Packing group**· **ADR, IMDG, IATA**

III

· **Environmental hazards:**· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

· **Danger code (Kemler):**

90

· **EMS Number:**

F-A,S-F

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **DOT**· **Remarks:**

Special marking with the symbol (fish and tree).

· **UN "Model Regulation":**

-

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Carcinogenicity categories**· **EPA (Environmental Protection Agency)**

206-44-0 | fluoranthene

D

· **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

· **MAK (German Maximum Workplace Concentration)**

Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**



GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

fluoranthene

· **Hazard statements**

Harmful if swallowed.

· **Precautionary statements**

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations**

· **Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Sara**

· **Section 355 (Extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is listed.

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Changes made since last issue dated 18.05.2011 at the following points: *

· **Department issuing MSDS:**

IGG-AD Ingenieurbüro für Gefahrstoff- und Gefahrgutberatung

Bismarckstraße 10

D-68623 Lampertheim

Fax: 0049-(0)6206-58422 <http://www.igg-ad.de> info@igg-ad.de

· **Contact:**

Dr. U. Prinz (u.prinz@igg-ad.de)Dipl.-Chem. H. Hinse (heidrun.hinse@igg-ad.de)

· **Date of preparation / last revision** 02/11/2014 / -

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

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ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

· *** Data compared to the previous version altered.**

—USA—