

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	
<i>Melting point/Melting range:</i> 105 - 110 °C (221 - 230 °F) (lit.)	
<i>Boiling point/Boiling range:</i> 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	
<i>Water:</i>	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)

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

· **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)**

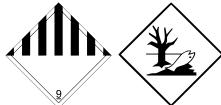
- **DOT**



- **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**

- **Cancerogenity 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 Arbejdshygienisk 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