

Printing date 10.02.2014 Revision: 10.02.2014

1 Identification of the substance/mixture and of the company/undertaking

· Product identifier

Trade name: ETD III Consumable Kit
Disposable Reactant Cartridge II

· Article number: 8250942

· 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

Fax: +49(421) 2205-100 E-mail: care@bdal.de

· Informing department:

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

· Emergency telephone number:

Tel.: +49 (361)730730 (24h)

Gemeinsames Giftinformationszentrum (GGIZ) (Posion Information Center)

United Kingdom of Great Britain and Northern Ireland

Regional Medicines and Poisons Information Centre NI, +44 28 90 63 2032

Australia

Queensland Poisons Information Centre, +61 7 363 68 148

Victorian Poisons Information Centre, +61 394 96 4509

Western Australian Poisons Information Centre, +61 893 46 1943

NSW Poisons Information Centre, +61 2 984 53 595

#### 2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



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.

(Contd. on page 2)

Printing date 10.02.2014 Revision: 10.02.2014

# Trade name: ETD III Consumable Kit Disposable Reactant Cartridge II

(Contd. of page 1)

· 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
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS07

- · Signal word Warning
- · Hazard-determining components of labelling:

fluoranthene

· Hazard statements

H302 Harmful if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P273 Avoid release to the environment.P264 Wash thoroughly after handling.

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

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

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.
- vi vi. mor applicable.

#### 3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Designation:

206-44-0 fluoranthene

- · Identification number(s):
- · EC number: 205-912-4

### 4 First aid measures

- · Description of first aid measures
- · General information Instantly 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 bring patient into stable side position for transport.

· After skin contact

*Instantly 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 doctor.
- · After swallowing

Rinse the mouth with water immediately

Instantly call for doctor.

(Contd. on page 3)

Printing date 10.02.2014 Revision: 10.02.2014

Trade name: ETD III Consumable Kit
Disposable Reactant Cartridge II

(Contd. of page 2)

- · 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.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### 5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- · Special hazards arising from the substance or mixture

Formation of poisonous gases during heating or in fires.

- · Advice for firefighters
- · Protective equipment: Wear self-contained breathing apparatus.
- · Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Cool endangered containers with water spray jet.

#### 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 causing dust.

*Use breathing protection against the effects of fumes/dust/aerosol.* 

· Environmental precautions:

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

· Methods and material for containment and cleaning up:

Collect mechanically.

Avoid causing dust.

Collect in a suitable container and dispose of as described at paragraph 13.

· 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 containers:

Store only in the original container.

Protect from dampness and humidity.

· Information about storage in one common storage facility: Store away from foodstuffs.

(Contd. on page 4)

Printing date 10.02.2014 Revision: 10.02.2014

# Trade name: ETD III Consumable Kit Disposable Reactant Cartridge II

(Contd. of page 3)

· Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Store container in a well ventilated position.

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

### 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 compilation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Do not eat, drink or smoke while working.

Wash hands during breaks and at the end of the work.

Take off immediately all 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-labelling 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 trough 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 safety glasses.

· Body protection: Protective work clothing.

-GB

Printing date 10.02.2014 Revision: 10.02.2014

Trade name: ETD III Consumable Kit
Disposable Reactant Cartridge II

(Contd. of page 4)

### 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Crystalline Colour: Yellow

· Odour: Not determined

· Change in condition

Melting point/Melting range: 105 - 110 °C (lit.) Boiling point/Boiling range: 384 °C (lit.)

• Flash point: 198 °C (closed cup)

· Inflammability (solid, gaseous) Product is not inflammable.

• Danger of explosion: Product is not explosive.

· Density Not determined

· Solubility in / Miscibility with

Water: Unsoluble

• 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 rea	elevant 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 effect 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.

(Contd. on page 6)

Printing date 10.02.2014 Revision: 10.02.2014

Trade name: ETD III Consumable Kit
Disposable Reactant Cartridge II

(Contd. of page 5)

Caution - substance not yet tested completely

### 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.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical 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 bodies 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 under adherence to official regulations.

· European waste catalogue		
	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except	
	kitchen and restaurant wastes not arising from immediate health care)	
18 02 00	wastes from research, diagnosis, treatment or prevention of disease involving animals	
18 02 05	chemicals consisting of or containing dangerous substances	

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information		
· UN-Number · ADR, IMDG, IATA	UN3077	
· UN proper shipping name · ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (fluoranthene)	

(Contd. on page 7)

Printing date 10.02.2014 Revision: 10.02.2014

Trade name: ETD III Consumable Kit
Disposable Reactant Cartridge II

	(Contd. of page
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S. (fluoranthene), MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID N.O.S. (fluoranthene)
· Transport hazard class(es)	
· 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.
· Kemler Number:	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:	
· <i>ADR</i>	
· Limited quantities (LQ)	5 kg
· UN "Model Regulation":	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S. (fluoranthene), 9, III

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

These data are based on our present knowledge. However, they 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 data specification sheet:

(Contd. on page 8)

Printing date 10.02.2014 Revision: 10.02.2014

Trade name: ETD III Consumable Kit
Disposable Reactant Cartridge II

(Contd. of page 7)

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)

· 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)

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

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

\* Data compared to the previous version altered.

- GB