

BCR-091: anthanthrene

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

1.1 Product identifier:

Product name : BCR-091: anthanthrene
 Product type REACH : Substance/mono-constituent
 CAS number : 191-26-4
 EC number : 205-886-4
 RTECS number : HO5900000
 Molecular mass : 276.34 g/mol
 Formula : C22H12

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Certified reference material for laboratory use only

1.3 Details of the supplier of the safety data sheet:

Supplier of the safety data sheet

Institute for Reference Materials and Measurements
 Retieseweg
 B-2440 Geel
 Tel: +32 14 57 12 11
 Fax: +32 14 59 04 06
 JRC-IRMM-RM-Sales@ec.europa.eu

1.4 Emergency telephone number:

Poison Centre:
 +32 70 245 245

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification according to Regulation EC No 1272/2008

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Carc.	category 1B	H350: May cause cancer.

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC
 Carc. Cat. 2; R45 - May cause cancer.

2.2 Label elements:

Labelling according to Regulation EC No 1272/2008 (CLP)

Signal word : Danger
 H-statements
 H350 : May cause cancer.
 P-statements
 P201 : Obtain special instructions before use.
 P202 : Do not handle until all safety precautions have been read and understood.
 P281 : Use personal protective equipment as required.
 P308 + P313 : IF exposed or concerned: Get medical advice/attention.
 P405 : Store locked up.
 P501 : Dispose of contents/container to manufacturer/competent authority.

2.3 Other hazards:

CLP
 No other hazards known

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SECTION 3: Composition/information on ingredients

3.1 Substances:

Name (REACH Registration No)	CAS No EC No	Conc. (C)	Classification according to DSD/DPD	Classification according to CLP	Note	Remark
dibenzo[def,mno]chrysene	191-26-4 205-886-4		Carc. Cat. 2; R45	Carc. 1B; H350	(1)	Mono-constituent

(1) For R-phrases and H-statements in full: see heading 16

3.2 Mixtures:

Not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures:

General:

If you feel unwell, seek medical advice.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Rinse with water. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed:

4.2.1 Acute symptoms

After inhalation:

No data available.

After skin contact:

No data available.

After eye contact:

No data available.

After ingestion:

No data available.

4.2.2 Delayed symptoms

If applicable and available it will be listed below.

4.3 Indication of any immediate medical attention and special treatment needed:

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

5.1.1 Suitable extinguishing media:

Polyvalent foam. ABC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture:

Upon combustion: CO and CO₂ are formed.

5.3 Advice for firefighters:

5.3.1 Instructions:

Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

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6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2 Environmental precautions:

Contain leaking substance. Dam up the solid spill. Prevent soil and water pollution. Prevent spreading in sewers.

6.3 Methods and material for containment and cleaning up:

Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4 Reference to other sections:

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1 Precautions for safe handling:

Avoid raising dust. Keep away from naked flames/heat. Warning! Avoid exposure. Obtain special instructions before use. Observe strict hygiene. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

Store in a cool area. Store in a dry area. Store in a dark area. Keep container in a well-ventilated place. Keep locked up. Unauthorized persons are not admitted. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) acids.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
No data available		

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

If applicable and available it will be listed below.

8.1.5 Control banding

If applicable and available it will be listed below.

8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Avoid raising dust. Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Warning! Avoid exposure. Obtain special instructions before use. Observe strict hygiene. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

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Dust formation: dust mask. High dust production: self-contained breathing apparatus.

b) Hand protection:

Gloves.

c) Eye protection:

Safety glasses. In case of dust production: protective goggles.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical form	Crystalline solid
Odour	Odourless
Odour threshold	No data available
Colour	Golden-yellow
Particle size	No data available
Explosion limits	No data available
Flammability	No data available on direct fire hazard
Log Kow	7.04 ; Experimental value
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	264 °C
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Vapour pressure	<0.00001 hPa ; 20 °C
Relative vapour density	Not applicable
Solubility	water ; 0.00013 g/100 ml toluene ; soluble 1,4-dioxane ; soluble olive oil ; soluble
Relative density	No data available
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
pH	No data available

Physical hazards

No physical hazard class

9.2 Other information:

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity:

No data available.

10.2 Chemical stability:

Stable under normal conditions.

10.3 Possibility of hazardous reactions:

Decomposes on exposure to (strong) acids. Reacts violently with (strong) oxidizers.

10.4 Conditions to avoid:

Avoid raising dust. Keep away from naked flames/heat.

10.5 Incompatible materials:

Oxidizing agents, (strong) acids.

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10.6 Hazardous decomposition products:

Upon combustion: CO and CO₂ are formed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

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No (test)data available

Corrosion/irritation

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No (test)data available

Respiratory or skin sensitisation

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No (test)data available

Specific target organ toxicity

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No (test)data available

Mutagenicity (in vitro)

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No (test)data available

Mutagenicity (in vivo)

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No (test)data available

Carcinogenicity

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No (test)data available

Reproductive toxicity

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No (test)data available

Conclusion CMR

May cause cancer.

Toxicity other effects

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No (test)data available

Chronic effects from short and long-term exposure

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ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: No specific information available. SIMILAR PRODUCTS CAUSE FOLLOWING SYMPTOMS: Feeling of weakness. Cracking of the skin. Skin rash/inflammation. Photoallergy. Skin cancer. Lung tissue affection/degeneration. Enlargement/affection of the liver. Affection of the renal tissue.

11.1.2 Other information

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EC carc cat	2
CLP repr cat	category 1B
MAK - Krebszeugend Kategorie	2

SECTION 12: Ecological information

12.1 Toxicity:

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No (test)data available

Conclusion

No data available on ecotoxicity

12.2 Persistence and degradability:

Biodegradability in water: no data available

Non degradable in the soil

12.3 Bioaccumulative potential:

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Log Kow

Method	Remark	Value	Temperature	Value determination
		7.04		Experimental value

Conclusion

High potential for bioaccumulation (Log Kow > 5)

12.4 Mobility in soil:

No (test)data on mobility of the substance available

12.5 Results of PBT and vPvB assessment:

Due to insufficient data no statement can be made whether the substance fulfils the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6 Other adverse effects:

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Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No. 1272/2008 and 1005/2009)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1 Waste treatment methods:

13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, decision 2000/0532/EC).

16 05 06* (laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals). Depending on branch of industry and production process, also other EURAL codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

13.1.2 Disposal methods

Specific preliminary treatment. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into surface water (2000/60/EC, Council decision 2455/2001/EC, O.J. L331 of 15/12/2001).

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1 UN number:

Transport	Insufficient data
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14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

14.4 Packing group:

Packing group	
Labels	

14.5 Environmental hazards:

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Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
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Limited quantities	
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Rail (RID)

14.1 UN number:

Transport	Insufficient data
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14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Hazard identification number	
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Class	
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Classification code	
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14.4 Packing group:

Packing group	
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Labels	
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14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
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Limited quantities	
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Inland waterways (ADN)

14.1 UN number:

Transport	Insufficient data
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14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Class	
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Classification code	
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14.4 Packing group:

Packing group	
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Labels	
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14.5 Environmental hazards:

Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
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Limited quantities	
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Sea (IMDG)

14.1 UN number:

Transport	Insufficient data
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14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Class	
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14.4 Packing group:

Packing group	
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Labels	
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14.5 Environmental hazards:

Marine pollutant	-
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Environmentally hazardous substance mark	no
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14.6 Special precautions for user:

Special provisions	
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Limited quantities	
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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Annex II of MARPOL 73/78	
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Air (ICAO-TI/IATA-DGR)

14.1 UN number:

Transport	Insufficient data
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14.2 UN proper shipping name:

14.3 Transport hazard class(es):

Class	
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14.4 Packing group:

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Packing group	
Labels	
14.5 Environmental hazards:	
Environmentally hazardous substance mark	no
14.6 Special precautions for user:	
Special provisions	
Passenger and cargo transport: limited quantities: maximum net quantity per packaging	

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

European legislation:

Volatile organic compounds (VOC)

0 %

15.2 Chemical safety assessment:

No chemical safety assessment has been conducted.

SECTION 16: Other information

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Not listed in Annex I of directive 67/548/EEC et sequens. Labelling established on the basis of the available data.

Labels



R-phrases

45 May cause cancer

S-phrases

53 Avoid exposure - obtain special instructions before use

36/37 Wear suitable protective clothing and gloves

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Full text of any R-phrases referred to under headings 2 and 3:

R45 May cause cancer

Full text of any H-statements referred to under headings 2 and 3:

H350 May cause cancer.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive

DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult your BIG licence agreement for details.