

Safety Data Sheet according to (EC) No. 1907/2006

Day of issue: 20 March 2000

Day of revision: 10 November 2008

1. Identification of the substance/preparation and of the company/undertaking

Trade names

AEC tablets fizzing buffer pH 5.1, cat. no. 4190

Use

Fizzing tablets for research and analysis.

Manufacturer/Supplier

See below.

Telephone/Telefax

See below.

Emergency telephone

+45 39 27 17 71

Responsible person for the safety data sheet (e-mail):

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2. Hazards identification**Particular information pertaining specific risk for human and environment**

Toxic tablets that may impair fertility and may cause harm to the unborn child. May also cause cancer and danger for the environment.

Classification: Repr Cat 2;R60-61 Xn;R22 Carc Cat 3;R40 R52/53**3. Composition/Information on ingredients**

% w/w	Chemical name	CAS no.	EINECS/ELINCS	Classification
3.5	3-Amino-9-ethyl-carbazole	132-32-1	205-057-7	T;R25 Carc Cat 3;R40 N;R51/53
10-20	Boric acid	10043-35-3	233-139-2	Repr Cat 2;R60-61

Wording of R-phrases - see section 16.

4. First-aid measures**Eye contact**

Flush thoroughly with water or physiological salt water, holding eye lids open.

Remember to remove contact lenses, if any. If irritation persists: seek medical advice.

Skin contact

Remove all contaminated clothing and wash subsequently with water and soap.

Inhalation

Go to fresh air. Keep at rest. If person feels queasy/discomfort: seek medical advise.

Ingestion

Rinse mouth and drink plenty of water. If immediate medical help isn't available: induce vomiting. Keep head down to prevent vomit in the lungs. Seek medical advice immediately.

Information

Show this Safety Data Sheet to a physician or emergency ward.

Trade name: **AEC tablets fizzing buffer pH 5.1**

5. Fire-fighting measures

Flammability

Combustible.

Extinguishing media - suitable

Use water, dry chemical, foam or carbon dioxide.

Extinguishing media - NOT suitable

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Special risks in a fire situation

At fire the product may form hazardous decomposition products such as: oxides of carbon and nitrogen.

Protective equipment

When extinguishing fires use breathing apparatus with an independent source of air.

Additional information

Remove containers if possible

6. Accidental release measures

Personal precautions

Provide for sufficient ventilation/respiratory protection.

See protective equipment listed in section 8.

Environmental precautions

Do not empty into drains. See section 12. If the product contaminates sewages, inform appropriate authorities in accordance with local regulations.

Methods for cleaning up/collecting

Collect spilled material and place it in a closed container for disposal. Subsequently wash area with plenty of water. Further handling of spillage - see section 13.

7. Handling and storage

Safe handling

See section 8.

Safe storage

In a well closed container, protected against moisture. Do not remove the included drying capsule.

Specific use(s):

See section 1.

8. Exposure controls and personal protection

Engineering measures (prevention of worker exposure)

Avoid breathing tablet dust and avoid contact with skin and eyes. Immediately wash contaminated skin. After use wash with plenty of water.

The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC).

Exposure limits: -

Personal protective equipment

Eye protection:

Wear close-fitting safety goggles when risk of splashes during manufacture of solution.

Skin protection:

Not required when forceps is used. Otherwise use gloves of nitrile rubber.

Breakthrough time: approximately 3 hours.

Respiratory protection:

Not required if used at proper ventilation.

Environmental exposure controls: -

Trade name: **AEC tablets fizzing buffer pH 5.1**

9. Physical and chemical properties

Appearance:	Fizzing tablets
Odour:	-
pH:	5.1 (water solution)
Boiling point (°C):	-
Flash point (°C):	-
Density (g/ml):	-
Solubility in water:	Soluble

10. Stability and reactivity

Stability

Combustible. Stable.

Conditions to avoid

Avoid heating and moisture (will initiate the fizzing process).

Materials to avoid

Avoid contact with oxidizing materials.

Hazardous decomposition products

At fire the product may form hazardous decomposition products: oxides of carbon and nitrogen.

11. Toxicological information

Routes of exposure: May be absorbed by inhalation and ingestion.

Acute toxicity:

Eyes: May cause irritation.

Skin: May cause irritation.

Inhalation: Inhalation of tablet dust can cause irritation of the respiratory tract. Symptoms can be coughing and shortness of breath.

Ingestion: May cause irritation of the gastrointestinal tract and in large doses: vomiting, diarrhea and stomach ache. Health effects when exposed to 3-amino-9-ethyl-carbazole are sparsely described in literature.

Long term toxicity: Boric acid may impair fertility and may cause harm to the unborn child. 3-Amino-9-ethyl-carbazole causes liver cancer in mice and rats.

12. Ecological information

Ecotoxicity:

No toxicological data is found, but the log K_{ow} of 3-amino-9-ethylcarbazole is 3.41, and therefore the substance is expected to be toxic to aquatic organisms.

Mobility:

Soluble.

Persistence and degradability:

3-Amino-9-ethylcarbazole is not readily biodegradable.

Bioaccumulative potential:

3-Amino-9-ethylcarbazole is suspected to bioaccumulate.

Other adverse effects:

Use can involve external environmental pollution. Do not empty into waters or drains.

13. Disposal considerations

Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code: 16 05 08

Trade name: **AEC tablets fizzing buffer pH 5.1****14. Transport information****Road/Rail (ADR/RID)**

Class : -
 UN No. : -
 Proper Shipping Name: -

15. Regulatory information**Classification according to EEC directives**

EINECS no.: -

Danger symbol and danger designation:

Toxic

Contains: Boric acid & 3-Amino-9-ethylcarbazole

Risk-phrases:

- R 60: May impair fertility.
- R 61: May cause harm to the unborn child.
- R 22: Also harmful if swallowed.
- R 40: Limited evidence of a carcinogenic effect.
- R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety-phrases:

- S 53: Avoid exposure - obtain special instructions before use.
- S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 61: Avoid release to the environment. Refer to special instructions / Safety Data Sheets.

Restricted to professional users.

Restriction on application

Restricted use: must not be used by persons under 18 years of age.
 Restricted to professional users.

16. Other information**R-phrases mentioned in section 3:**

R 60: May impair fertility.
 R 61: May cause harm to the unborn child.
 R 25: Toxic if swallowed.
 R 40: Limited evidence of a carcinogenic effect.
 R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Requirements concerning special training

No special training is anticipated, however, the user should be well instructed for the execution of his task, have knowledge of this Safety Data Sheet and normal training in the use of personal protective equipment.

Edition no.: 06**(Revision) Date:** 10 November 2008**Changes in section(s):**

1, 2, 3, 4, 7, 8, 11, 13, 15 and 16

This Safety Data Sheet was created by:

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