

Safety Data Sheet according to EC-Regulation 91/155/EEC

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

Identification of the substance or preparation

SABINE

480 g/l Bifenox CAS 42576-02-3

Use of the substance/preparation

Herbicide

Company/undertaking identification

Feinchemie Schwebda GmbH, Strassburger Str. 5, D-37269 Eschwege

Telephone ++49 (0)5651/9237-0, Fax ++49 (0)5651/22442

Emergency telephone / Office for advice

Advisory office in case of poisoning:

Tel.: +49 30 / 19240

Telephone number of the company in case of emergencies:

Tel. ++49 (0)5651/9237-0

2. Composition/information on ingredients

Formulation:

Suspension concentrate

2.1 Chemical name	content %	symbol	R-phrases	EINECS, ELINCS
Bifenox	30 - 50	N	50-53	255-894-7
Dipropylene glycol/1,2-benzisothiazol-3(2H)-one/sodium hydroxide, watery solution	0,1 -< 1	Xn/Xi/C/N	22-34-43-50	

For complete wording of the R-phrases, refer to point 16.

3. Hazards identification

3.1 To people

Preparation is classified as hazardous in the sense of directive 1999/45/EC.

See point 11 and 15.

Not applicable

3.2 To the environment

See point 12.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First aid measures

4.1 Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

4.2 Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Keep Data Sheet available.

4.3 Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

4.4 Ingestion

Consult doctor immediately - keep Data Sheet available.

4.5 Special resources necessary for first aid

n.g.

5. Fire-fighting measures

5.1 Suitable extinguishing media

Water jet spray / foam / CO₂ / dry extinguisher

5.2 Extinguishing media which must not be used for safety reasons

k.D.v.

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of fire the following can develop:

Toxic gases

Oxides of carbon

Oxides of nitrogen

Hydrogen chloride

5.4 Special protective equipment for fire-fighters

Protective respirator with independent air supply

According to size of fire

Full protection, if necessary

5.5 Further information

Dispose of contaminated extinction water according to official regulations.

6. Accidental release measures

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

6.2 Environmental measures

If leakage occurs, dam up.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods for cleaning up

Collect using absorbant material (e.g. Universal binding medium), and dispose of according to point 13.

7. Handling and storage

7.1 Handling

Tips for safe handling:

See point 6.1

Ensure good ventilation.

General hygiene measures for the handling of chemicals are applicable.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.2. Storage

Requirements for storage rooms and containers:

Observe regulations for keeping separated.

Store products only unopened, in original packing.

Not to be stored in gangways or stair wells.

Suitable material:

PE

Special storage conditions:

See point 10.2

Protect from frost.

Stability during storage:

3 / 6 EN

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SABINE

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8. Exposure controls/personal protection

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Chemical Name	Dipropylene glycol/1,2-benzisothiazol-3(2H)-one/sodium hydroxide, watery solution	
WEL-TWA: ---	WEL-STEL: 2 mg/m ³ (NaOH)	---
BMGV: ---	Other information: ---	

Chemical Name	Propane-1,2-diol	
WEL-TWA: 150 ppm (474 mg/m ³) (total, vapour and particulates), 10 mg/m ³ (particulates)	WEL-STEL: ---	---
BMGV: ---	Other information: ---	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AG = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BG = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.1 Respiratory protection:

If fumes build up, use suitable breathing mask.

8.2 Hand protection:

Protective Neopren gloves (EN 374).

Protective nitrile gloves (EN 374)

Protective hand cream recommended.

8.3 Eye protection:

Tight fitting protective goggles (EN 166) with side protection, with danger of projections.

8.4 Skin protection:

Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments)

Additional information on hand protection - No tests have been performed.

Selection made for preparations according to the best available knowledge and information on the ingredients.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of preparations the resistance of glove materials cannot be calculated in advance

so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

9. Physical and chemical properties

Physical state:	Viscous, Liquid
Colour:	Opaque, Beige
Odour:	Slightly
pH-value undiluted:	n.v.
1 % pH-value:	7,8 (CIPAC MT 75.2), 7,38 (CIPAC MT 75.3)
Boiling point/range (°C):	n.v.
Melting point/range (°C):	n.v.
Flash point (°C):	n.g.
Flammability (solid/gas):	n.g.
Autoflammability:	440°C (EEC A15)
Oxidising properties:	No
Minimum limit of explosion:	n.a. (EEC A14)
Maximum limit of explosion:	n.a. (EEC A14)
Product is not explosive.	
Density (g/ml):	1,183 (MT 3.3.1, EEC A3)
Solubility in water:	Dispersion
Partition coefficient (n-octanol/water):	n.g.
Viscosity:	37 mPas (EF-839-02-96)
Surface tension:	29 mN/m (EEC A5)

10. Stability and reactivity

10.1 Conditions to avoid

See point 7
Stable when handled and stored correctly.
Protect from frost.

10.2 Materials to avoid

See point 7
Avoid contact with other chemicals.
Avoid contact with strong oxidizing agents.

10.3 Hazardous decomposition products

See point 5.3

11. Toxicological information

11.1 Acute toxicity and immediate effects

Ingestion, LD50 rat oral (mg/kg):	> 5000 (OECD 401)
Inhalation, LC50 rat inhal.(mg/l/4h):	> 1,43 EPA No. 145
Skin contact, LD50 rat dermal (mg/kg):	> 2000 (OECD 402)
Eye contact: (OECD 405)	Mild irritant, Rabbit

11.2 Delayed and chronic effects

Sensitization: modified Buehler patch test	No
Carcinogenicity: Rat	No
NOEL 2years 80mg/kg Mouse	
NOEL 2years 50ppm Mutagenicity: invitro bacteria cell tests	No
Reproductive toxicity: Rat	No
NOEL 37,5 mg/kg Rabbit	
NOEL 20 mg/kg/d Narcosis:	n.g.

11.3. Further information

Classification based on toxicological analyses.

12. Ecological information

Water hazard class (Germany):	2
Self classification:	Yes (VwVwS)
Persistence and degradability: DT50 soil 20,8 d * DT50 water phase 1,7 d * DT50 sediment 2 d *	
Behaviour in sewage plants:	n.v.
Aquatic toxicity: Toxicity to fish: Onchorhynchus mykiss LC50 28,3 mg/l/96h (OECD 203) Oncorhynchus mykiss LC50 0,64 - 2,44 mg/l/28d (OECD 204), NOEC 0,64 mg/l Toxicity to daphnia: Daphnia magna EC50 34,8 mg/l/48h (OECD 202/1) Daphnia magna EC50, reprod. 0,73 mg/l/21d (OECD 202, 2), EC50, immobilisation 3,5 mg/l/21d, NOEC 0,28 mg/l Toxicity to algae: Scenedesmus subspicatus EbC50 0,000719 mg/l/72h (OECD 201)	
Ecological toxicity:	n.v.
* Bifenox	

13. Disposal considerations

13.1. for the material / preparation / residue

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances.

02 01 08 agrochemical waste containing dangerous substances

07 04 01 aqueous washing liquids and mother liquors

20 01 19 pesticides

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

13.2 for contaminated packing material

See point 13.1

Pay attention to local and national official regulations

Empty container completely.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

14. Transport information

General statements

UN-Number: 3082

Road/Rail-transport (ADR/RID)

Class/packing-group: 9/III

Classification code: M6

LQ: 7

Transport by sea

IMDG-code: 9/III (class/packing-group)

EmS: F-A, S-F

Marine Pollutant: n.a.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BIFENOX)

Transport by air

IATA: 9/-/III (class/secondary danger/packing-group)

Environmentally hazardous substance, liquid, n.o.s. (BIFENOX)

Additional information:

Danger code and packing code on request.

15. Regulatory information

Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)

Symbols: N

Indications of danger:



Dangerous for the environment

R-phrases:

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases:

29/35 Do not empty into drains; dispose of this material and its container in a safe way.

57 Use appropriate container to avoid environmental contamination.

Additions:

To avoid risks to man and the environment, comply with the instructions for use.

Contains

Dipropylene glycol/1,2-benzisothiazol-3(2H)-one/sodium hydroxide, watery solution

May produce an allergic reaction.

Observe restrictions:

Yes

16. Other information

These details refer to the product as it is delivered.

Storage class VCI (Germany):

12

Revised points:

2, 8, 15

Observe plant protection medium law.

The following phrases represent the prescribed R-phrases for the ingredients (designated in point 2).

50 Very toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

22 Harmful if swallowed.

34 Causes burns.

43 May cause sensitization by skin contact.

Legend:

n.a. = not applicable / n.v., k.D.v. = not available / n.g. = not checked

OES = Occupational exposure standard / MEL = Maximum exposure limit / BMGV = Biological monitoring guidance value

AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BGW = "Biologischer Grenzwert" (biological limit value, Germany)

VbF = Regulations for flammable liquids (Austria)

WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water

VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds

VwVwS = Administrative Order relating to substances hazardous to water (Germany)

The statements made here should describe the product with regard to the necessary safety precautions - they are

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

Chemical Check GmbH, Beim Staumberge 3, D-32839 Steinheim, Tel.: 01805-CHEMICAL / 01805-243 642, Fax: 05233-941790

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