

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.01.2012

Revision: 26.01.2012

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

- **Product identifier**
- **Trade name** **BOTAMENT Garden KV (Komponente B)**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Epoxy impregnation  
Hardening agent/ Curing agent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** BOTAMENT Systembaustoffe  
Am Kruppwald 1  
D-46238 Bottrop  
  
Tel.: ++49(0)2041 101-90  
Fax.: ++49(0)2041 101-988
- **Informing department:** Product safety department.  
msds@botament.com
- **Emergency telephone number:** Tel.: ++49(0)178 310 10 43

**2 Hazards identification**

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



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



C; Corrosive

R34: Causes burns.



Xn; Harmful

R22: Harmful if swallowed.



Xi; Sensitising

R43: May cause sensitisation by skin contact.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **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.

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· **Classification system:** The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

· **Label elements**

· **Labelling according to EU guidelines:**

The product has been labelled in accordance with EC Directives / relevant national laws.

· **Code letter and hazard designation of product:**



C Corrosive

· **Hazard-determining components of labelling:**

3-aminomethyl-3,5,5-trimethylcyclohexylamine

· **Risk phrases:**

22 Harmful if swallowed.  
34 Causes burns.  
43 May cause sensitisation by skin contact.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

20 When using do not eat or drink.  
23 Do not breathe vapour/spray  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**3 Composition/information on ingredients**

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with harmless additions.

· **Dangerous components:**

	Polyamine-Addukt Xi R38-41 Eye Dam. 1, H318; Skin Irrit. 2, H315	25-50%
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CAS: 100-51-6 EINECS: 202-859-9	Benzyl alcohol Xn R20/22 Acute Tox. 4, H302; Acute Tox. 4, H332	<25%
CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine C R34; Xn R21/22; Xi R43 R52/53 Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	<25%
	Polyoxypropylentriamin C R34; Xn R21/22 Acute Tox. 3, H301; Acute Tox. 3, H311; Skin Corr. 1B, H314	<5%
CAS: 9046-10-0	Polyoxypropylenediamine C R34; Xn R22 Skin Corr. 1B, H314	<5%
CAS: 102-71-6 EINECS: 203-049-8	2,2',2"-nitrilotriethanol Xn R48/22; Xi R41 STOT RE 2, H373; Eye Dam. 1, H318	<1.5%
CAS: 110-85-0 EINECS: 203-808-3	piperazine C R34; Xn R62-63; Xn R42/43 Repr. Cat. 3 Resp. Sens. 1, H334; Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412	<1%
CAS: 140-31-8 EINECS: 205-411-0	2-piperazin-1-ylethylamine C R34; Xn R21/22; Xi R43 R52/53 Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	<0.5%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

#### 4 First aid measures

- **Description of first aid measures**
- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Seek medical treatment.
- **After swallowing** Drink copious amounts of water and provide fresh air. Instantly call for doctor.
- **Information for doctor**
- **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.

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### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Inform respective authorities in case product reaches water or sewage system.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections** See Section 8 for information on personal protection equipment.

### 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Store in cool, dry place in tightly closed containers.  
Open and handle container with care.
- **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:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **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.

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- **Control parameters**
- **Components with critical values that require monitoring at the workplace:** *The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.*
- **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.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.*
- **Protection of hands:** *Protective gloves.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  
After use of gloves apply skin-cleaning agents and skin cosmetics.*
- **Material of 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*
- **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.*
- **Eye protection:** *Tightly sealed safety glasses.*
- **Body protection:** *Protective work clothing.*

**9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- **Form:** *Fluid*
- **Colour:** *Yellow*
- **Smell:** *Characteristic*

· **Change in condition**

- **Melting point/Melting range:** *Not determined*
- **Boiling point/Boiling range:** *> 200°C*

· **Flash point:** *> 100°C*

· **Ignition temperature:** *380°C*

· **Self-inflammability:** *Product is not selfigniting.*

· **Danger of explosion:** *Product is not explosive.*

· **Critical values for explosion:**

· **Lower:** *1.3 Vol %*

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<b>Upper:</b>	13.0 Vol %
· <b>Steam pressure at 20°C:</b>	0.1 hPa
· <b>Density at 20°C</b>	1 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix
· <b>Other information</b>	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:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine**

Oral LD50 250 mg/kg (Ratte)

- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** Sensitization possible by skin contact.
- **Additional toxicological information:** The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.

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- **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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:** Harmful to aquatic organisms  
Do not allow product to reach ground water, water bodies or sewage system.  
Danger to drinking water if even small quantities leak into soil.
- **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 not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11	waste paint and varnish containing organic solvents or other dangerous substances

- **Uncleaned packagings:**
- **Recommendation:** Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

**14 Transport information**

- **UN-Number**
- **ADR, IMDG, IATA** UN2289
- **UN proper shipping name**
- **ADR** 2289 ISOPHORONEDIAMINE
- **IMDG, IATA** ISOPHORONEDIAMINE
- **Transport hazard class(es)**
- **ADR**
- **Class** 8 (C7) Corrosive substances.
- **Label** 8
- **IMDG, IATA**
- **Class** 8 Corrosive substances.

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· <b>Label</b>	8
· <b>Packing group</b> · <b>ADR, IMDG, IATA</b>	III
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b> · <b>Kemler Number:</b> · <b>EMS Number:</b>	Warning: Corrosive substances. 80 F-A,S-B
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b> · <b>Tunnel restriction code</b>	E
· <b>UN "Model Regulation":</b>	UN2289, ISOPHORONEDIAMINE, 8, III

**15 Regulatory information**

· **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.*

- **Relevant phrases**
- H301 Toxic if swallowed.
  - H302 Harmful if swallowed.
  - H311 Toxic in contact with skin.
  - H312 Harmful in contact with skin.
  - H314 Causes severe skin burns and eye damage.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H318 Causes serious eye damage.
  - H332 Harmful if inhaled.
  - H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - H373 May cause damage to organs through prolonged or repeated exposure.
  - H412 Harmful to aquatic life with long lasting effects.
  - R20/22 Harmful by inhalation and if swallowed.
  - R21/22 Harmful in contact with skin and if swallowed.
  - R22 Harmful if swallowed.
  - R34 Causes burns.
  - R38 Irritating to skin.
  - R41 Risk of serious damage to eyes.
  - R42/43 May cause sensitisation by inhalation and skin contact.
  - R43 May cause sensitisation by skin contact.

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*R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.*

*R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

*R62 Possible risk of impaired fertility.*

*R63 Possible risk of harm to the unborn child.*

· **Department issuing data specification sheet:**

· **Contact:**

· **Abbreviations and acronyms:**

*Environment protection department.*

*Mr. Hemming*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*ICAO: International Civil Aviation Organization*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

· **\* Data compared to the previous version altered.**