

Safety data sheet

According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010






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

- **Product identifier**
- **Trade name:** VAS 3 Cement
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Adhesives
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Forbo Siegling Pty. Ltd
Factory 1, 124-126 Rodeo Drive
Dandenong South
Victoria 3175. Australia
Ph.: 1300137933
Fax: 1300137944
- **Information department:**
Chemical Laboratory
Email: Claudius.Hayduk@forbo.com
- **Emergency telephone number:**
(001) 352 323 3500 (Transport hazardous materials)
++49 (0) 511-6704-214

2 Composition/information on ingredients

- **Description:** Mixture consisting of the following components.

- **Dangerous components:**

CAS: 64-18-6 EINECS: 200-579-1	Ameisensäure	 C R35	50-70%
CAS: 108-46-3 EINECS: 203-585-2	resorcinol	 Xn R22;  Xi R36/38;  N R50	10-25%
CAS: 64-17-5 EINECS: 200-578-6	ethanol	 F R11	10-25%

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

3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



C; Corrosive

R34: Causes burns.



Xn; Harmful

R22: Harmful if swallowed.



F; Highly flammable

R11: Highly flammable.

- **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.

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

(Contd. on page 2)

-AU-

Safety data sheet

According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010

Trade name: VAS 3 Cement

(Contd. of page 1)

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



C Corrosive
F Highly flammable

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

resorcinol
Ameisensäure

- **Risk phrases:**

11 Highly flammable.
22 Harmful if swallowed.
34 Causes burns.

- **Safety phrases:**

7/9 Keep container tightly closed and in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
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).
60 This material and its container must be disposed of as hazardous waste.

- **Information pertaining to particular dangers for man and environment**

- **Safety phrases:**

7/9 Keep container tightly closed and in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
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).
60 This material and its container must be disposed of as hazardous waste.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

4 First aid measures

- **Description of first aid measures**

- **General information**

Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation**

Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing**

Call for a doctor immediately.
Drink copious amounts of water and provide fresh air. Call for a doctor immediately.

- **Information for doctor** MSDB

5 Firefighting measures

- **Extinguishing media**

- **Suitable extinguishing agents**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 3)

Safety data sheet According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010

Trade name: VAS 3 Cement

(Contd. of page 2)

- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:**

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

- **Reference to other sections**

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- **Handling**

- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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:**

64-18-6 Ameisensäure

NES (Australia) Short-term value: 19 mg/m³, 10 ppm

Long-term value: 9.4 mg/m³, 5 ppm

108-46-3 resorcinol

NES (Australia) Short-term value: 90 mg/m³, 20 ppm

Long-term value: 45 mg/m³, 10 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 4)

Safety data sheet

According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010

Trade name: VAS 3 Cement

(Contd. of page 3)

- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.
- **Breathing equipment:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**
 Solvent resistant gloves
 Protective gloves.
 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**
 Butyl rubber, BR
 Fluorocarbon rubber (Viton)
 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** 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:	According to product specification
Odour:	Odourless
Odour threshold:	Not determined.

· pH-value at 20°C: 1

· Change in condition

Melting point/Melting range:	Melting point > 120°C
Boiling point/Boiling range:	78°C

· Flash point: 9°C

· Ignition temperature: 400°C

· Decomposition temperature: Not determined.

· Self igniting: Not determined.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:

Lower:	3.5 Vol %
Upper:	33.0 Vol %

· Vapour pressure at 20°C: 59 hPa

(Contd. on page 5)

AU

Safety data sheet

According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010

Trade name: VAS 3 Cement

(Contd. of page 4)

· Density at 20°C:	1.10256 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

· Solubility in / Miscibility with Water:	Fully miscible
---	----------------

· Segregation coefficient (n-octanol/water): Not determined.

· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.

· Solvent content:	
Organic solvents:	13.9 %
Water:	10.0 %

Solids content:	19.0 %
· 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: 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:

64-18-6 Ameisensäure

Oral	LD50	1100 mg/kg (rat)
------	------	------------------

108-46-3 resorcinol

Oral	LD50	301 mg/kg (rat)
Dermal	LD50	3360 mg/kg (rabbit)

- Primary irritant effect:
 - on the skin: Caustic effect on skin and mucous membranes.
 - on the eye: Strong caustic effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

-AU-

(Contd. on page 6)

Safety data sheet

According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010

Trade name: VAS 3 Cement

(Contd. of page 5)

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

108-46-3 resorcinol

Sensitisation	EC50/24h	107.6 mg/l (daphnia) Quelle : IUCLID
	LC50/96h	34.7 mg/l (Goldorfe) Quelle : Hoechst

- **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.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- **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 04 09* | waste adhesives and sealants containing organic solvents or other dangerous substances

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.

- **Danger code (Kemler):** 368

- **UN-Number:** 3286

- **Packaging group:** II

- **Label** 3+6.1+8

- **UN proper shipping name:** 3286 FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (ETHANOL (ETHYL ALCOHOL), RESORCINOL)

(Contd. on page 7)

Safety data sheet

According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010

Trade name: VAS 3 Cement

(Contd. of page 6)

· Tunnel restriction code D/E

· Maritime transport IMDG:



- IMDG Class: 3
- UN Number: 3286
- Label: 3+6.1+8
- Packaging group: II
- EMS Number: F-E,S-C
- Marine pollutant: No
- Proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (ETHANOL (ETHYL ALCOHOL), RESORCINOL)

· Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 3
- UN/ID Number: 3286
- Label: 3+6.1+8
- Packaging group: II
- Proper shipping name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (ETHANOL, RESORCINOL)

- Special precautions for user Warning: Flammable liquids.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

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

· Australian Inventory of Chemical Substances

64-18-6	Ameisensäure
108-46-3	resorcinol
7732-18-5	water, distilled, conductivity or of similar purity
78-93-3	butanone

· Standard for the Uniform Scheduling of Drugs and Poisons

64-18-6	Ameisensäure	S5
78-93-3	butanone	S5

· Markings according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· Code letter and hazard designation of product:



C Corrosive
F Highly flammable

· Hazard-determining components of labelling:

resorcinol
Ameisensäure

· Risk phrases:

11 Highly flammable.
22 Harmful if swallowed.

(Contd. on page 8)

Safety data sheet

According to 91/155 EEC

Printing date 22.11.2010

Version number 19

Revision: 22.11.2010

Trade name: VAS 3 Cement

(Contd. of page 7)

34 Causes burns.

• Safety phrases:

- 7/9 Keep container tightly closed and in a well-ventilated place.
- 16 Keep away from sources of ignition - No smoking.
- 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).
- 60 This material and its container must be disposed of as hazardous waste.

• National regulations
• Technical instructions (air):

Class	Share in %
Wasser	10.0
II	0.1
NK	70.4

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• Relevant phrases

- R11 Highly flammable.
- R22 Harmful if swallowed.
- R35 Causes severe burns.
- R36/38 Irritating to eyes and skin.
- R50 Very toxic to aquatic organisms.

• Department issuing MSDS: Chemical Laboratory

• Contact:

C.Hayduk
 Tel.-Nr. +49 511 6704 214
 Fax-Nr. +49 511 6704 489
 Mobil-Nr.+49 151 11741970

-AU-