

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

Printing date 30.09.2020

Revision: 30.09.2020

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

- **1.1 Product identifier**
- **Trade name:** HADALAN VS-E 12E, Komp. B
- **Article number:** 40312B
- **UFI:** GG70-60TT-V00J-DWWA
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Solvent-free, 2-component elastic epoxy resin floor coating, component B (hardener)
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Sievert Baustoffe GmbH & Co. KG
Mühlenschweg 6
D-49090 Osnabrück
Tel.: +49 2363 5663-0
- **Further information obtainable from:**
Abteilung: Produktsicherheit
Tel.: +49 2363 5663-0
info-hahne@sievert.de
- **1.4 Emergency telephone number:**
Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,
Tel.: 0551-19240

SECTION 2: Hazards identification

- **2.1 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.
Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

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· **Hazard pictograms**

GHS05 GHS07 GHS09

· **Signal word** *Danger*· **Hazard-determining components of labelling:**

Poly(propylene glycol) bis(2-aminopropyl ether)

Carbomonocyclic alkylated mixtures of poly-aza-alkanes, hydrogenated
N-(2-Aminoethyl)-1,2-ethanediamine reaction products with glycidyl tolyl ether
phenol, styrenated

trimethylhexane-1,6-diamine

3-aminopropyldiethylamine

· **Hazard statements**

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**· **Description:** Containing amine hardener for epoxy resin· **Dangerous components:**

CAS: 9046-10-0	Poly(propylene glycol) bis(2-aminopropyl ether) ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 3, H412	25-50%
CAS: 1173092-74-4	Carbomonocyclic alkylated mixtures of poly-aza-alkanes, hydrogenated ⚠ Skin Corr. 1C, H314; ⚠ Aquatic Acute 1, H400; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; ⚠ Skin Sens. 1, H317	10-25%
CAS: 61788-44-1	phenol, styrenated ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319; ⚠ Skin Sens. 1, H317	2.5-10%
CAS: 90-72-2 EINECS: 202-013-9	2,4,6-tris(dimethylaminomethyl)phenol ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; ⚠ Acute Tox. 4, H312; ⚠ Eye Irrit. 2, H319; ⚠ Aquatic Chronic 3, H412	2.5-10%
CAS: 25620-58-0 EINECS: 247-134-8	trimethylhexane-1,6-diamine ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; ⚠ Skin Sens. 1, H317	2.5-10%
CAS: 61788-46-3 EINECS: 262-977-1	cocoalkylamine ⚠ STOT RE 2, H373; ⚠ Asp. Tox. 1, H304; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; ⚠ Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; ⚠ STOT SE 3, H335	2.5-10%

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- **Additional information:**
For the wording of the listed hazard phrases refer to section 16.
GISCODE: RE 1 (Comp. A + B)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **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 plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
Water spray, dry powder, foam, carbon dioxide.
- **For safety reasons unsuitable extinguishing agents:** Water jet.
- **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Mount respiratory protective device.
Wear self-contained breathing apparatus and protective suit.
- **Additional information**
In combustion carbon dioxide, carbon monoxide and nitrogen oxides may be formed.
Burning produces obnoxious and toxic fumes.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Avoid contact with skin, eyes and clothing.
Do not breathe vapors.
Keep away from sources of ignition - no smoking.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
Avoid seepage into the ground.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Open and handle container with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Keep containers closed tight.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Protect from frost, heat and direct sunlight.
- **Storage class:** Storage Class 8 corrosive substances.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

61788-46-3 cocoalkylamine (2.5-10%)
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WEL Long-term value: 0.38 mg / m ³ mg / m ³

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

- **8.2 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.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

- **Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment.
Filter type AX-P2 (organic vapors, particles).

- **Protection of hands:**

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**

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.

Hand protection materials: butyl rubber, nitrile rubber

- **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.

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- **Eye protection:** Tightly sealed goggles
- **Body protection:** Protective clothing, safety shoes.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

- | | |
|---------------------------|-----------------|
| · Form: | Fluid |
| · Colour: | yellowish |
| · Odour: | by amine |
| · Odour threshold: | Not determined. |

- | | |
|--------------------|-----------------|
| · pH-value: | Not determined. |
|--------------------|-----------------|

· Change in condition

- | | |
|---|---------------|
| · Melting point/freezing point: | Undetermined. |
| · Initial boiling point and boiling range: | 205 °C |

- | | |
|-----------------------|--------|
| · Flash point: | 101 °C |
|-----------------------|--------|

- | | |
|-------------------------------------|-----------------|
| · Flammability (solid, gas): | Not applicable. |
|-------------------------------------|-----------------|

- | | |
|--------------------------------|--------|
| · Ignition temperature: | 435 °C |
|--------------------------------|--------|

- | | |
|-------------------------------------|-----------------|
| · Decomposition temperature: | Not determined. |
|-------------------------------------|-----------------|

- | | |
|-------------------------------------|------------------------------|
| · Auto-ignition temperature: | Product is not selfigniting. |
|-------------------------------------|------------------------------|

- | | |
|--------------------------------|---|
| · Explosive properties: | Product does not present an explosion hazard. |
|--------------------------------|---|

· Explosion limits:

- | | |
|-----------------|-----------------|
| · Lower: | Not determined. |
| · Upper: | Not determined. |

- | | |
|---------------------------|-----------------|
| · Vapour pressure: | Not determined. |
|---------------------------|-----------------|

- | | |
|-------------------|-----------------|
| · Density: | Not determined. |
|-------------------|-----------------|

- | | |
|---------------------------|-----------------|
| · Relative density | Not determined. |
|---------------------------|-----------------|

- | | |
|-------------------------|-----------------|
| · Vapour density | Not determined. |
|-------------------------|-----------------|

- | | |
|---------------------------|-----------------|
| · Evaporation rate | Not determined. |
|---------------------------|-----------------|

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

- | | |
|--|-----------------|
| · Partition coefficient: n-octanol/water: | Not determined. |
|--|-----------------|

· Viscosity:

- | | |
|----------------------------|-----------------|
| · Dynamic at 20 °C: | 350 mPas |
| · Kinematic: | Not determined. |

- | | |
|--------------------------------|--|
| · 9.2 Other information | No further relevant information available. |
|--------------------------------|--|

SECTION 10: Stability and reactivity

- | | |
|--------------------------|--|
| · 10.1 Reactivity | No further relevant information available. |
|--------------------------|--|

· 10.2 Chemical stability

- | | |
|--|---|
| · Thermal decomposition / conditions to be avoided: | No decomposition if used according to specifications. |
|--|---|

- | | |
|--|-------------------------------|
| · 10.3 Possibility of hazardous reactions | No dangerous reactions known. |
|--|-------------------------------|

- | | |
|-----------------------------------|--|
| · 10.4 Conditions to avoid | No further relevant information available. |
|-----------------------------------|--|

· 10.5 Incompatible materials:

- Strong acids and strong bases.
- Strong oxidizing agents.

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- **10.6 Hazardous decomposition products:** Carbon oxides, nitrogen oxides.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**

Harmful if swallowed.

- **LD/LC50 values relevant for classification:**

9046-10-0 Poly(propylene glycol) bis(2-aminopropyl ether)

Oral	LD50	2,855 mg/kg (rat)
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Dermal	LD50	2,980 mg/kg (rab)
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61788-44-1 phenol, styrenated

Oral	LD50	480 mg/kg (rat)
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Dermal	LD50	>5,010 mg/kg (rab)
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61788-46-3 cocoalkylamine

Oral	LD50	1,240 mg/kg (rat)
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Dermal	LD50	>2,000 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**

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

- **12.2 Persistence and degradability** No further relevant information available.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Very toxic for fish

- **Other information:**

Avoid seepage into the ground.

Do not empty into drains.

Do not contaminate surface water.

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

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- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations




- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
With HADALAN VS-E mix, component A and let harden.

- **European waste catalogue**

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA | UN2735 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG, IATA | 2735 AMINES, LIQUID, CORROSIVE, N.O.S.
(P o l y o x y p r o p y l e n d i a m i n ,
TRIMETHYLHEXAMETHYLENEDIAMINES),
ENVIRONMENTALLY HAZARDOUS
AMINES, LIQUID, CORROSIVE, N.O.S.
(P o l y o x y p r o p y l e n d i a m i n ,
TRIMETHYLHEXAMETHYLENEDIAMINES) |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR | <div style="display: flex; align-items: center; gap: 10px;">   </div> |
| <ul style="list-style-type: none"> · Class · Label | 8 Corrosive substances.
8 |
| <ul style="list-style-type: none"> · IMDG, IATA | <div style="display: flex; align-items: center; gap: 10px;">  </div> |
| <ul style="list-style-type: none"> · Class · Label | 8 Corrosive substances.
8 |
| <ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA | III |
| <ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): | No
Symbol (fish and tree) |
| <ul style="list-style-type: none"> · 14.6 Special precautions for user · Hazard identification number (Kemler code): | Warning: Corrosive substances.
80 |

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· EMS Number:	F-A,S-B
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (POLYOXYPROPYLENEDIAMINE, TRIMETHYLHEXAMETHYLENEDIAMINES), 8, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations:**
- **Waterhazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
During activities involving exposure to uncured epoxy resins and contact via the skin or the Regular medical check-ups are to be arranged for the respiratory tract.
The product is subject to RL 2004/42 / EG.
EU limit value for this product is in the used state: Cat A / j max. 500 g / l (2010). The product when used, contains: max. 1 g / l VOC.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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**
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
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.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

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H373 May cause damage to the liver, the immune system and the gastro-intestinal tract through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

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

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral - Category 4

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Skin Corr. 1C: Skin corrosion/irritation - Category 1C

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Skin Sens. 1: Skin sensitisation - Category 1

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Asp. Tox. 1: Aspiration hazard - Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3