

Printing date 23.10.2012

Revision: 23.10.2012

Lachtigication	of the substance/mixture and of the company/undertaking
Product identifi	er
Trade name: <u>H</u>	ADALAN EG145 13E, Komp. B
Application of t	ied uses of the substance or mixture and uses advised against he substance / the preparation g, two-component epoxy resin for priming mineral substrates with risk of moisture penetrat
Manufacturer/S	GmbH & Co. KG
Abteilung: Prod Tel.: 02363 566 EMail: info@ha Emergency tele	3-0 hne-bautenschutz.de phone number: szentrum Nord (GIZ Nord) Universität Göttingen,
Hazards iden	tification
	f the substance or mixture ccording to Regulation (EC) No 1272/2008
Classification a GHSC Skin Corr. 1B	
Classification a GHSC Skin Corr. 1B	ccording to Regulation (EC) No 1272/2008 05 corrosion H314 Causes severe skin burns and eye damage. 09 environment 2 H411 Toxic to aquatic life with long lasting effects.
Classification a GHSC Skin Corr. 1B GHSC Aquatic Chronic GHSC	 ccording to Regulation (EC) No 1272/2008 p5 corrosion H314 Causes severe skin burns and eye damage. p9 environment p2 H411 Toxic to aquatic life with long lasting effects.
Classification a GHSC Skin Corr. 1B GHSC Aquatic Chronic Aquatic Chronic GHSC Acute Tox. 4	 ccording to Regulation (EC) No 1272/2008 corrosion H314 Causes severe skin burns and eye damage. environment e 2 H411 Toxic to aquatic life with long lasting effects. H312 Harmful in contact with skin.
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Classification a GHSC Skin Corr. 1B Corr. 1B Corr. 1B Corr. 1B Corr. 1B Corr. 1B Chassification a Classification a Hazard descript C Corrosive N Dangerous fo Information con R 20/22 Harm R 35 Causes R 37 Irritati R 43 May co	 ccording to Regulation (EC) No 1272/2008 15 corrosion H314 Causes severe skin burns and eye damage. 99 environment 2 H411 Toxic to aquatic life with long lasting effects. 17 H312 Harmful in contact with skin. H332 Harmful if inhaled. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. ccording to Directive 67/548/EEC or Directive 1999/45/EC

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



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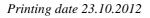
· Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data. · Label elements · Labelling according to EU guidelines: The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials. · Code letter and hazard designation of product: C Corrosive N Dangerous for the environment · Hazard-determining components of labelling: Cyanethyliertes m-Xylylendiamin trimethylhexane-1,6-diamine *m*-phenylenebis(methylamine) 4-tert-butylphenol · Risk phrases: 20/22 Harmful by inhalation and if swallowed. 35 Causes severe burns. 37 Irritating to respiratory system. 43 May cause sensitisation by skin contact. 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. · Safety phrases: 23 Do not breathe vapour. 24/25 Avoid contact with skin and eyes. 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 27 Take off immediately all contaminated clothing. 29 Do not empty into drains. 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). · Other hazards · Results of PBT and vPvB assessment · **PBT:** Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Amine-containing curing agent for epoxy resin.

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· Dangerous compone	ents:	
CAS: 98-54-4	4-tert-butylphenol	>25 - < 50%
EINECS: 202-679-0	Xi R36/37/38	
	🚯 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	-
CAS: 73050-11-0	Cyanethyliertes m-Xylylendiamin	>25- < 50%
	☐ C R34; 🗙 Xn R20/21; 🗙 Xi R43 R52/53	
	♦ Skin Corr. 1B, H314; (1) Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Sens. 1, H317; Aquatic Chronic 3, H412	_
CAS: 1477-55-0	m-phenylenebis(methylamine)	>10- <25%
EINECS: 216-032-5	🛃 C R34; 💥 Xn R22	
	♦ Skin Corr. 1B, H314;	-
CAS: 25620-58-0	trimethylhexane-1,6-diamine	>5 - <10%
EINECS: 247-134-8	🛃 C R34; 🗙 Xn R22; 🗙 Xi R43	
	📀 Skin Corr. 1B, H314; 🚸 Acute Tox. 4, H302; Skin Sens. 1, H317	-
Additional informati	on: For the wording of the listed risk phrases refer to section 16.	

4 First aid measures

- · 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. If symptoms persist, consult a doctor.
- · After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.
- 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.

5 Firefighting measures

- Extinguishing media Use fire extinguishing methods suitable to surrounding conditions.
- Suitable extinguishing agents: Foam (alcohol resistent), carbon dioxide, dry powder, water spray
- For safety reasons unsuitable extinguishing agents: Water jet.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- Protective equipment: In case of fire: breathing protection with independent air supply.

6 Accidental release measures

- *Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.*
- · Environmental precautions:
- Do not allow product to reach sewage system or any water course.
- Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to enter sewers/ surface or ground water.

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• 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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections
 See Section 7 for information on safe handling.
 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. Only store in original containers.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities

· Storage:

- · Requirements to be met by storerooms and receptacles: Keep cool and dry.
- · Information about storage in one common storage facility: Store separate from eatables.
- Further information about storage conditions: Keep container tightly sealed. Protect from frost.
- · Storage class: VCI: 8
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

· Ingredients with limit values that require monitoring at the workplace:

98-54-4 4-tert-butylphenol (25-50%)

AGW 0.5 mg/m3, 0.08 ml/m3 2(II); DFG, H

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

- · 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 and skin.

· Respiratory protection:

Not required if good ventilation. In inadequately ventilated places and during spraying respiratory protection. A/P2 filter.

• Protection of hands:

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

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[·] Control parameters

[—] GB

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• *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.

Wear safety gloves made of nitrile rubber with a thickness < 0.4 mm (penetration time> 480 min - see also www.gisbau.de

• *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 goggles
- **Body protection:** Protective clothing.

9 Physical and chemical properties

· Information on basic physical	and chemical properties
• General Information	
· Appearance:	
Form:	Liquid
Colour:	yellowish
· Odour:	aminic
• pH-value at 20°C:	8.5 - 11
· Change in condition	
Melting point/Melting range:	
Boiling point/Boiling range:	$>200^{\circ}C$
· Flash point:	140°C
· Ignition temperature:	510°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapour pressure at 50°C:	< 5 hPa
• Density at 20°C:	1.06 g/cm ³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
wuie1.	
· Viscosity:	
Dynamic at 20°C:	500 mPas
· Solvent content:	
Organic solvents:	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

Keep away from strongly acidic and alkaline materials as well as oxidizing agents in order to avoid exothermic reactions.

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· Incompatible materials: No further relevant information available.

· *Hazardous decomposition products:* $At > 60 \circ C$ elimination of acrylonitrile possible.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values relevant for classification:

1477-55-0 m-phenylenebis(methylamine)				
Oral	LD50	1040 mg/kg (rat)		
	LD50	2000 mg/kg (rab)		
Inhalative	LC50/4 h	2.4 mg/l (rat)		

· Primary irritant effect:

- on the skin: Caustic effect on skin and mucous membranes.
- on the eye: Strong caustic effect.
- · Sensitization: Sensitization possible through skin contact.
- · 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
- 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.
- · 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.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground. Harmful to aquatic organisms

- · 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 together with household garbage. Do not allow product to reach sewage system.

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· European waste catalogue

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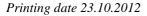
08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

UN-Number ADR, IMDG, IATA	2735		
UN proper shipping name ADR	2735 AMINES, LIQUID, CORROSIVE, N.O.S. (m phenylenebis(methylamine)), ENVIRONMENTALL HAZARDOUS		
IMDG, IATA	AMINES, LIQUID, CORROSIVE, N.O.S. (m phenylenebis(methylamine))		
Transport hazard class(es)			
ADR			
Class	8 Corrosive substances.		
Label	8		
Class	8 Corrosive substances.		
Label	8		
Packing group ADR, IMDG, IATA	111		
Environmental hazards: Special marking (ADR):	Symbol (fish and tree)		
Special precautions for user	Warning: Corrosive substances.		
Danger code (Kemler): EMS Number:	80 F-A,S-B		
<i>EMS Number:</i> <i>Transport in bulk according to Annex I</i> <i>MARPOL73/78 and the IBC Code</i>			
Transport/Additional information:			
ADR Tunnel restriction code	E		
UN "Model Regulation":	UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (n phenylenebis(methylamine)), ENVIRONMENTALL HAZARDOUS, 8, III		

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15 Regulatory information

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

- · National regulations:
- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · Other regulations, limitations and prohibitive regulations

For activities involving exposure to uncured epoxy resins and contact on the skin or respiratory are causing regular preventive medical examinations.

This product is subject to the Directive 2004/42/EC.

EU limit value of this product is in ready to use condition: 500 g / l (2010). The product contains: 0 g / l *VOC*.

· 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

- H302 Harmful if swallowed.
- 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.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.
- R20/21 Harmful by inhalation and in contact with skin.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- *R43 May cause sensitisation by skin contact.*
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 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 Organization
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (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 Harmonized System of Classification and Labelling of Chemicals
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent