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1 Identification

- · Trade name: UZIN Epoxy Accelerator
- · Application of the substance / the mixture Accelerator for 2-Component Epoxy Resins
- Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Manufacturer: UZIN UTZ SE Dieselstrasse 3 D-89079 Ulm Germany Tel.: +49 (0)731 4097-0 Fax: +49 (0)731 4097-110

Supplier: Uzin Utz North America, Inc. 14509 E. 33rd. Place, Unit G Aurora, CO 80011 Phone: +720-374-4810 Toll-Free: +1 866-505-4810 Fax: +1 720-374-2113

• Information department: Product safety department phone: 720-373-4810 email: safety.us@uzin-utz.com

• Emergency telephone number:

For Chemical Emergency Spill Leak Fire Exposure or Accident Call CHEMTREC Day or Night: DOMESTIC NORTH AMERICA 800-424-9300 International, call +49 621 60 43 333

2 Hazard(s) identification

· Classification of the substance or mixture GHS02 Flame Flammable Liquids 2 H225 Highly flammable liquid and vapor. GHS05 Corrosion Eye Damage 1 H318 Causes serious eye damage. GHS07 Acute Toxicity - Oral 4 H302 Harmful if swallowed. · Label elements · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS02 GHS05 GHS07 (Contd. on page 2) US

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· Signal word Danger	(Contd. of page 1
· Hazard-determining components of labeling:	
Nitric acid, ammonium calcium salt	
· Hazard statements	
Highly flammable liquid and vapor.	
Harmful if swallowed.	
Causes serious eye damage.	
Precautionary statements	
Keep away from heat/sparks/open flames/hot surfaces No smoking.	
Keep container tightly closed.	
Wear protective gloves / eye protection.	
If in eyes: Rinse cautiously with water for several minutes. Remove contact lense	es if present and easy to do
Continue rinsing.	is, y present and easy to de
Immediately call a poison center/doctor.	
Store in a well-ventilated place. Keep cool.	
Information pertaining to particular dangers for man and environment:	
NFPA ratings (scale 0 - 4)	
Health = 3	
Flammability = 3	
3 0 Reactivity = 0	
HMIS-ratings (scale 0 - 4)	
HEALTH *3 $H_{ealth} = *3$	
FIRE 3 $Flammability = 3$	
REACTIVITY 0 <i>Reactivity</i> $= 0$	
Other hazards	
NFPA Rating Scale: $0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Serious; 5 = Seriou$	vere.
NFPA is the National Fire Protection Association. IIMIS Pating Scales $0 = Minimals$, $1 = Slight$, $2 = Moderates$, $2 = Serieurs$, $4 = Serieurs$, $5 =$	
HMIS Rating Scale: $0 = Minimal$; $1 = Slight$; $2 = Moderate$; $3 = Serious$; $4 = Sev HMIS$ ®, the Hazardous Materials Identification System, is a registered mark	
	oj ine National Faint an
Coatings Association (NPCA).	
Results of PBT and vPvB assessment PBT: Not applicable.	
<i>vPvB:</i> Not applicable.	
VFVD. Not applicable.	
Composition/information on ingredients	
Chemical characterization: Mixtures	
Description: Solvent mixture with additives	
Harmadana inanadianta.	

· Hazardous ingredients:

[•] maturabus ingrea	uenis.	
CAS: 64-17-5	Ethanol	50-75%
	🚸 Flammable Liquids 2, H225	
	Nitric acid, ammonium calcium salt	25-50%
	 Eye Damage 1, H318; 🚯 Acute Toxicity - Oral 4, H302	

• Additional information:

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets. For the wording of the listed hazard phrases refer to section 16.

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4 First-aid measures

· Description of first aid measures

• After inhalation:

Supply fresh air; consult doctor in case of complaints.

- 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:

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a doctor.

• After swallowing: Do not induce vomiting; immediately call for medical help.

- · 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 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water
- Special hazards arising from the substance or mixture Can form explosive gas-air mixtures.
- Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures
- *Wear protective equipment. Keep unprotected persons away.*
- Keep away from ignition sources
- Ensure adequate ventilation
- · Environmental precautions: 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). 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.
- Protective Action Criteria for Chemicals

· PAC-1:

CAS: 64-17-5	Ethanol	1,800 ppm
CAS: 103-83-3	benzyldimethylamine	0.62 mg/m ³
• PAC-2:		
CAS: 64-17-5		3300* ppm
CAS: 103-83-3	benzyldimethylamine	6.8 mg/m ³
· PAC-3:		
CAS: 64-17-5	Ethanol	15000* ppm
CAS: 103-83-3	benzyldimethylamine	41 mg/m ³

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· Handling:

- · Precautions for safe handling
- Wear suitable protective clothing, gloves and eye/face protection. Immediately remove all soiled and contaminated clothing. Avoid contact with the eyes and skin. Keep away from foodstuffs, beverages and feed. Do not inhale gases / fumes / aerosols.
- Wash hands before breaks and at the end of work.
- *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: Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
 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.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:
- The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

CAS: 64-17-5 Ethanol

- PEL Long-term value: 1900 mg/m³, 1000 ppm
- REL Long-term value: 1900 mg/m³, 1000 ppm
- TLV Short-term value: 1000 ppm
- *A3*
- Exposure controls
- Personal protective equipment:
 General protective and hygienic measures:
- Avoid contact with the eyes and skin.
- Avoia contact with the eyes and skin.
- *Wear suitable protective clothing, gloves and eye/face protection. Keep away from foodstuffs, beverages and feed.*
- Do not inhale gases / fumes / aerosols.
- Wash hands before breaks and at the end of work.
- Respiratory protection:
- Not necessary in well ventilated areas or areas with local exhaust ventilation (e.g. ex protected ventilation / evacuation equipment).
- In case of insufficient ventilation wear appropriate, certified respirator with A2-filter (observe maximum wearing time as specified by manufacturer).
- Protection of hands:



Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

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· Material of gloves

Butyl rubber, BR Nitrile rubber, NBR

Recommended thickness of the material: $\geq 0.5 \text{ mm}$

· 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:



· Viscosity:

Tightly sealed goggles or face protection

9 Physical and chemical properties		
Information on basic physical and ch	emical properties	
· General Information		
· Appearance:		
Form:	Fluid	
Color:	Light yellow	
· Odor:	Alcohol-like	
• Odor threshold:	Not determined.	
pH-value:	Not determined.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	78 °C (172.4 °F)	
· Flash point:	13 °C (55.4 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Auto igniting:	425 °C (797 °F)	
• Decomposition temperature:	Not determined.	
· Ignition temperature:	Product is not selfigniting.	
• Danger of explosion:	Product does not present an explosion hazard.	
• Explosion limits:		
Lower:	3.5 Vol %	
Upper:	15 Vol %	
· Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)	
· Density at 20 °C (68 °F):	0.9 g/cm ³ (7.51 lbs/gal)	
· Relative density	Not determined.	
· Vapor 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.	

Dynamic: Not determined. Kinematic: Not determined.

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Trade name: UZIN Epoxy Accelerator

• Other information

No further relevant information available.

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

- *Thermal decomposition / conditions to be avoided:* No decomposition if used according to specifications. • *Possibility of hazardous reactions*
- Reacts with reducing agents.

Reacts with flammable substances.

• *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:

Oral LD50 1,041 mg/kg (rat)

CAS: 64-17-5 Ethanol

Oral LD50 7,060 mg/kg (rat)

Inhalative LC50/4 h 20,000 mg/l (rat)

CAS: 15245-12-2 Nitric acid, ammonium calcium salt

Oral LD50 >2,000 mg/kg (rat)

• Specific symptoms in biological assay:

· Primary route(s) of entry: Inhalation, skin contact, eye contact, ingestion.

· Primary irritant effect:

- on the skin: Slightly irritant effect may occur.
- on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.

• Additional toxicological information:

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

CAS: 64-17-5 Ethanol

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- *Bioaccumulative potential* No further relevant information available.

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• *Mobility in soil* No further relevant information available.

• Additional ecological information:

· General notes: Do not allow product to reach ground water, water course or sewage system.

· 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:

Do not allow product to reach sewage system.

Disposal should be in accordance with local, state or national legislation.

· Uncleaned packagings:

· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

14 Transport information

DOT, ADR, IMDG, IATA	UN1170
UN proper shipping name	
DOT	Ethanol
ADR	1170 ETHANOL (ETHYL ALCOHOL)
IMDG	ETHANOL (ETHYL ALCOHOL)
IATA	ETHANOL
DOT	
RAMAGE FLOOP	
Class	3 Flammable liquids
Label	3
IMDG, IATA	
Class	3 Flammable liquids
Label	3
DOT, IMDG, IATA	Π
Environmental hazards:	
Environmental hazards: Marine pollutant:	No
Marine pollutant:	
Marine pollutant:	No r Warning: Flammable liquids F-E,S-D
Marine pollutant: Special precautions for use	r Warning: Flammable liquids

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Regulatory information	
Safety, health and environmental regulations/legislation specific for the substance o SARA (Superfund Amendments and Reauthorization Act)	or mixture
EPCRA Section 302 (Extremely Hazardous Substances):	
None of the ingredient is listed.	
SARA Title III Section 313 (Toxic Release Inventory - TRI):	
None of the ingredients is listed.	
TSCA (Toxic Substances Control Act): All ingredients are listed.	
All components have the value ACTIVE.	
Hazardous Air Pollutants	
None of the ingredients is listed.	
Proposition 65 (California)	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
CAS: 64-17-5 Ethanol	
Carcinogenicity categories	
EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
TLV (Threshold Limit Value)	
CAS: 64-17-5 Ethanol	A
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	

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

H225 Highly flammable liquid and vapor.H302 Harmful if swallowed.H318 Causes serious eye damage.

- · Department issuing SDS: Product safety department
- Contact: Product safety department phone: 720-373-4810 email: safety.us@uzin-utz.com

• 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) ICAO: International Civil Aviation Organisation ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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IATA: International Air Transport Association 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) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Flammable Liquids 2: Flammable liquids – Category 2 Acute Toxicity - Oral 4: Acute toxicity - Category 4 Eye Damage 1: Serious eye damage/eye irritation - Category 1

• * Data compared to the previous version altered.

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