

MSDS- VOGA GROUT-EPX

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VOGEL SYSTEMS Safety data sheet

Date /Revised: 19.09.2022

Product: **MSDS- VOGA GROUT-EPX**

Version: 1.0

Date of print 20.09.2022

1. Identification

Product identifier

VOGA GROUT-EPX

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Product for construction chemicals Recommended use: for industrial and professional users



Details of the supplier of the safety data sheet

E-mail address: info@vogel-systems.de

Emergency telephone number

International emergency number

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**1. Product identifier**Product name **VOGA GROUT-EPX****2. Relevant identified uses of the substance or mixture and uses advised against**Identified uses : **Epoxy Resin Castable Grout****3. Details of the supplier of the safety data sheet**Supplier

Company name : Vogel co.

E-mail address: info@vogel-systems.de**2. COMPOSITION/INFORMATION ON INGREDIENTS****GHS Classification**

Skin Corrosion/Irritation – Category 1B

Serious Eye Damage/Irritation – Category 1

Skin Sensitization – Category 1

STOT-SE (respiratory irritation) – Category 3

Signal word: Danger**Pictograms:** GHS05, GHS07**Hazard statements:**

H314 Causes severe skin burns and eye damage

H317 May cause an allergic skin reaction

H335 May cause respiratory irritation

Precautionary statements:

P260 Do not breathe vapours or mist

P264 Wash thoroughly after handling

P272 Contaminated work clothing must not be allowed out of the workplace

P280 Wear protective gloves, protective clothing, eye and face protection

P302 + P352 IF ON SKIN: Wash with plenty of water

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

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

P310 Immediately call a POISON CENTER or doctor/physician

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention

3. COMPOSITION

Component	CAS No.	Concentration (% w/w)	Classification
Bisphenol A-based epoxy resin	6-38-25068	60–40	Skin Irrit. 2; Skin Sens. 1
Novolac epoxy resin	4-14-28064	20–10	Skin Irrit. 2; Eye Irrit. 2
Polyamine curing agent (proprietary)	Confidential	20–10	Skin Corr. 1B; Skin Sens. 1
Quartz filler	7-60-14808	30–15	Not classified
Fumed silica (thickener)	5-52-112945	5–1	Not classified

4. FIRST AID MEASURES**Inhalation:**

- Remove to fresh air. Keep at rest.
- If irritation persists, seek medical attention.

Skin contact:

- Remove contaminated clothing; wash skin immediately with soap and large amounts of water for ≥15 min.
- Do not use solvents or thinners.
- Get medical attention for burns or persistent irritation.

Eye contact:

- Rinse cautiously with water for ≥15 min, lifting both eyelids.
- Remove contacts if present and easy to do.
- Seek immediate ophthalmologist care.

Ingestion:

- Rinse mouth. Do NOT induce vomiting.
- Give water if conscious.
- Immediately call a poison center or doctor.

Notes to physician:

- Treat symptomatically. Burns may require neutralization and specialized wound care.

5. FIRE FIGHTING MEASURES**Suitable Extinguishing Media**

- Dry chemical powder (e.g., ABC)
- Carbon dioxide (CO₂)
- Alcohol-resistant foam
- Water spray or fog

Unsuitable Extinguishing Media

- Do **not** use direct, high-pressure water jets (may spread burning liquid from packaging).

Specific Hazards Arising from the Chemical

- Uncured resin and hardener are combustible.
- In fire, may evolve:
 - Carbon monoxide (CO)
 - Carbon dioxide (CO₂)
 - Nitrogen oxides (NO_x)
 - Irritating and toxic fumes

Special Protective Equipment and Precautions for Fire-fighters

- Wear full structural firefighting turnout gear (helmet, coat, pants, boots, gloves).
- Use self-contained breathing apparatus (SCBA) with full facepiece.
- Cool exposed containers with water spray to prevent pressure build-up and possible rupture.
- Approach fire from upwind; avoid standing in low-lying areas where heavier-than-air vapours may accumulate.

Additional Information

- Fire-fighting water runoff may be contaminated—contain and dispose of according to local environmental regulations.
- Prevent extinguishing water from entering drains or waterways.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions**

- Evacuate non-essential personnel and ventilate area.
- Avoid inhalation of vapours or dust; if exposure limits may be exceeded, wear an organic-vapour/particulate respirator.
- Wear chemical-resistant gloves (nitrile or neoprene), splash-resistant goggles or face shield, and protective clothing.

Environmental Precautions

- Prevent product from entering drains, sewers or waterways.
- Contain any run-off with sand, earth or absorbent barriers; notify authorities if release reaches surface water.

Methods for Containment

- **Unmixed liquids (Part A or B):** Dike spill with inert absorbent (vermiculite, sand).
- **Mixed grout (uncured):** Allow to cure in place if practical, then collect solid mass.

Methods for Cleanup

- Absorb unmixed liquid with inert material and transfer to labeled waste containers for incineration (see Section 13).
- For uncured mixed grout, let material harden; then break up and shovel into waste drums.
- Residual film or dust may be wiped with solvent-dampened rags; place rags in sealed container and handle as hazardous waste.
- After bulk removal, wash area with water and detergent, collecting wash-water for proper disposal.

References

- See Section 8 for recommended personal protective equipment.
- See Section 13 for waste disposal methods.

7. HANDLING AND STORAGE**Handling**

- Use only in well-ventilated areas to avoid accumulation of vapours or dust.
- Minimise skin and eye contact—wear chemically resistant gloves (nitrile or neoprene), long-sleeved protective clothing, and splash-resistant goggles or a face shield.
- Avoid inhalation of vapours/mists; if airborne concentrations may exceed occupational limits, use an approved organic-vapour/particulate respirator.
- Do **not** eat, drink, or smoke while handling the product. Wash hands and exposed skin thoroughly after handling and before breaks.
- Mix components only in their original, tightly closed containers. When combining, always add hardener (Part B) slowly into resin (Part A) while stirring to control exotherm.
- Keep containers closed when not in use to prevent moisture ingress and accidental spills.

Storage

- Store resin (Part A) and hardener (Part B) separately in a cool, dry, well-ventilated area, away from direct sunlight, heat sources, sparks, and open flames.
- Recommended storage temperature: 5 – 30 °C.
- Protect from moisture; Part B (amine hardener) is moisture sensitive and may react on contact with humid air.
- Keep away from strong acids, oxidizing agents, and incompatible materials.
- Use on a first-in, first-out basis; shelf life is 12 months from date of manufacture when stored as directed.
- Ensure secondary containment or spill trays beneath storage containers to catch any leaks or drips.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Parameter	Limit	Source
Inhalable dust (quartz)	0.1 mg/m ³ (respirable)	OSHA PEL
Polyamine vapour (OEL-TWA)	1 mg/m ³	ACGIH

- **Engineering controls:** Local exhaust ventilation
- **Respiratory:** Organic-vapour/particulate respirator if limits exceeded
- **Eye:** Splash-resistant goggles
- **Skin:** Nitrile or neoprene gloves; full protective clothing
- **Hygiene:** Wash hands before breaks and after work

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Part A: amber liquid; Part B: clear liquid
Odour	Slight amine
pH (mixed)	11–9~
Flash point	Part A: >200 °C; Part B: >100 °C (PMCC)
Vapour pressure (20 °C)	<0.1 mm Hg
Solubility	Insoluble in water; soluble in epoxides
Relative density (mixed)	1.6–1.4
Viscosity (mixed)	10,000–30,000 mPa·s (rotational)

10. STABILITY AND REACTIVITY**Chemical Stability**

- Both Part A (resin) and Part B (hardener) are stable under recommended storage and handling conditions (5–30 °C, dry, well-ventilated).

Possibility of Hazardous Reactions

- Hazardous polymerization will not occur in the separate components.
- Once resin and hardener are mixed, an exothermic curing reaction takes place—avoid mixing large volumes at once to control heat buildup.

Conditions to Avoid

- Excessive heat (> 50 °C) or direct sunlight (may degrade the components).
- Prolonged exposure of Part B to moisture or high humidity (can cause premature reaction and gelling).
- Generation of dust from any powdered fillers (respirable dust may irritate airways).

Incompatible Materials

- Strong acids (e.g., hydrochloric, sulfuric)
- Strong oxidizing agents (e.g., peroxides, nitrates)
- Unapproved amines or curing agents outside specified formulation
- Reactive metals (e.g., sodium, potassium)

Hazardous Decomposition Products

- In fire or at elevated temperatures:
 - Carbon monoxide (CO)
 - Carbon dioxide (CO₂)
 - Nitrogen oxides (NO_x)
 - Irritating amine vapors and phenolic fragments

Additional Information

- Good housekeeping is essential to prevent accumulation of mixed residues.
- Ensure adequate ventilation to dissipate any low-level vapors during and after mixing.

11. TOXICOLOGICAL INFORMATION

- **Acute Toxicity**
 - Oral (rat):** LD₅₀ > 2,000 mg/kg (estimated for mixed product)
 - Dermal (rabbit):** LD₅₀ > 2,000 mg/kg (estimated)
 - Inhalation (rat):** LC₅₀ > 5 mg/L (4 h, vapour/mist)
- **Skin Corrosion/Irritation**
 - Category 1B: Causes severe skin burns (Part B hardener).
- **Serious Eye Damage/Irritation**
 - Category 1: Causes serious eye damage (Part B hardener).
- **Skin Sensitization**
 - Category 1: May cause allergic skin reactions (amine hardener).
- **Respiratory Sensitization**
 - Not classified: No data indicating respiratory sensitization.
- **Specific Target Organ Toxicity – Single Exposure (STOT-SE)**
 - Category 3: May cause respiratory tract irritation if vapours or mists are inhaled in high concentrations.
- **Specific Target Organ Toxicity – Repeated Exposure (STOT-RE)**
 - Not classified: No known chronic target-organ effects from repeated exposures at expected use levels.
- **Carcinogenicity**
 - Not listed by IARC, NTP, OSHA, or EU as a carcinogen.
- **Mutagenicity / Genotoxicity**
 - Negative in standard in vitro and in vivo assays.
- **Reproductive Toxicity**
 - Not classified: Available data show no adverse effects on fertility or development.
- **Aspiration Hazard**
 - Not relevant for non-volatile, viscous materials once mixed.

Note: Prolonged or repeated skin contact with uncured epoxy components may lead to dermatitis; always use recommended protective equipment and wash skin thoroughly after handling.

12. ECOLOGICAL INFORMATION

- **Aquatic Toxicity**
 - Fish (96 h LC₅₀):** 10–100 mg/L (hardener component)
 - Daphnia magna (48 h EC₅₀):** 1–10 mg/L (hardener component)
 - Algae (72 h ErC₅₀):** 10–100 mg/L (mixed product)
- **Persistence and Degradability**
 - Resin and cured material:** Forms a cross-linked network; not readily biodegradable.
 - Hardener (amine):** Moderately biodegradable under aerobic conditions (BOD/COD ratio < 0.3).
- **Bioaccumulative Potential**
 - Log K_{ow} (mixed):** < 3, indicating low potential for bioaccumulation.

- **Mobility in Soil**
Mixed/cured: Immobile; adheres strongly to soil and sediment particles.
Uncured components: Limited water solubility; slight leaching of amine residues possible over prolonged exposure.
- **Other Adverse Effects**
pH effect: Runoff may be alkaline (pH 9–11); neutralize before discharge to protect aquatic organisms.
Not classified as PBT (Persistent, Bioaccumulative, Toxic) or vPvB (very Persistent, very Bioaccumulative) under REACH.
- **Recommendations:** Prevent release of uncured material to waterways. Collect spills for curing and dispose of as solid waste. Any wash-off water should be contained, pH-adjusted to 6–9, and treated before release.

13. DISPOSAL CONSIDERATIONS

- **Waste Treatment Methods**
 - **Uncured Liquid Components (Part A & B):**
Absorb spills and residual liquid with inert material (e.g., sand, vermiculite).
Collect in clearly labeled, compatible containers for disposal at a licensed hazardous-waste facility or incineration.
 - **Mixed (Uncured) Grout:**
Allow material to fully cure (harden) in situ or in containers.
Once cured, dispose of as non-hazardous solid construction waste in accordance with local regulations.
 - **Cured Material:**
Dispose as non-hazardous solid waste; may be recycled if accepted by local facilities.
 - **Cleaning Solvents / Rinseate:**
Collect and manage as hazardous waste; do not discharge to drains.
- **Contaminated Packaging**
Empty containers retain product residues.
Triple-rinse with water or an appropriate solvent; collect rinseate as hazardous waste.
Offer rinsed containers for recycling or dispose of via licensed waste-management channels.
- **Regulatory Considerations**
Comply with Egypt's Environmental Law No. 4/1994 and any applicable local or national waste-management regulations.
Maintain waste characterization and disposal records as required by authorities.
Ensure transport of hazardous waste off-site follows regulations (see Section 14).
Always consult local environmental authorities for site-specific disposal requirements and permits.

14. TRANSPORT INFORMATION

Mode	UN No.	Proper Shipping Name	Class	PG
Road/Rail (ADR)	UN 2735	Amines, liquid, corrosive, n.o.s. (Part B)	8	III
Sea (IMDG)	UN 2735	Amines, liquid, corrosive, n.o.s.	8	III
Air (IATA)	UN 2735	Amines, liquid, corrosive, n.o.s.	8	III

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15. Regulatory Information

- **GHS Labeling (Egypt & EU)**
- **Signal word:** Danger
- **Pictograms:**
 - GHS05 (Corrosion)
 - GHS07 (Exclamation)
- **Hazard Statements:** H314, H317, H335
- **Precautionary Statements:** P260, P264, P272, P280, P302+P352, P305+P351+P338, P310, P333+P313
- **European Union**
- **REACH (EC 1907/2006):** All components pre-registered or registered.
- **CLP (EC 1272/2008):** Resin and hardener classified under Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1, STOT SE 3.
- **VOC Directive (2004/42/EC):** < 50 g/L VOC (mixed).
- **United States**
- **TSCA Inventory:** All ingredients listed.
- **OSHA Hazard Communication Standard (29 CFR 1910.1200):** Hazardous chemical.
- **CERCLA/SARA:**
 - SARA 311/312: Acute health hazard.
 - SARA 313: Hardener component (amines) reportable.
- **Egyptian Regulations**
- **Environmental Law No. 4/1994:** Classification and disposal requirements for chemical wastes.
- **GHS Alignment:** Adoption of GHS Rev. 6 for classification and labeling.
- **Label Approval:** Labels must be approved by Ministry of Industry & Trade.
- **Other International Listings**
- **Canada (DSL/NDSL):** All components listed.
- **Australia (AICS):** All components listed.
- **China (IECSC):** All components listed.
- **Japan (ENCS):** All components listed.

Users must verify and comply with any additional, jurisdiction-specific regulations and update SDS and labels as regulations evolve.

16. OTHER INFORMATION

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.