# Technical Data Sheet



**Properties:**

AKEMI® Colouring Concentrates liquid / Colouring Pastes are concentrates in different colour shades. The products are characterized by the following properties:

- easy colouring of adhesives based on polyester, epoxyacrylate and PUR
- the liquid consistency (of concentrates) makes it easier to mix with liquid products
- matching the colour of the adhesive to many common stone colours
- balanced pigment concentration, thus easy adjustment of different colour shades and high coverage
- extremely UV- and light-resistant pigments, i.e. no fading
- no deterioration of the properties of the coloured adhesives

**Application Area:**

AKEMI® Colouring Concentrates liquid / Colouring Pastes are used for colouring Marble Filler 1000, Marble Filler Super, MS 76, PLATINUM P+ (expoxyacrylate adhesive), Polishing Line Adhesive RAPID and EVER-CLEAR (PUR adhesive). Thus, the colour of the adhesive can be adjusted to the respective stone colour.

**Instructions for Use:**

1. Add maximum 5% of AKEMI® Colouring Concentrate liquid / Colouring Paste to the adhesive to be coloured, depending on the colour of the concentrate and the stone.
2. Mix well until a homogenous shade of colour is achieved.

**Special Notes:**

- For professional use only.
- Use afin® Liquid Glove to protect your hands.
- Hardener to be added after the colour had been adjusted.
- For proper waste disposal, the container must be completely emptied.
- Recycling in accordance with the guidelines of EU Decision 97/129 EC on the Packaging Directive 94/62/EC.

**Technical Data:**

Colours: red, redbrown, white, black, ochre, green, brown, blue
Colouring Concentrates: additionally beige, grey

**Storage:**

If stored in dry and cool condition (5-25°C/41-77°F) in its closed original container at least 3 years from production.

**Health & Safety:**

Read Safety Data Sheet before handling or using this product.

**Important Notice:**

The above information is based on the latest stage of development and application technology. Due to a multiplicity of different influencing factors, this information – as well as other oral or written technical advises – must be considered as non-binding hints. The user is obliged in each particular case to conduct performance tests, including but not limited to trails of the product, in an inconspicuous area or fabrication of a sample piece.



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

Printing date 17.05.2023 Version number 4 (replaces version 3) Revision: 17.05.2023

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

· **1.1 Product identifier**
· Trade name: **Colouring Pastes for Marble Filler**

· Article number: 11001, 11002, 11003, 11004, 11005, 11006, 11007, 11011, 11012
· **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 Stainer

· **1.3 Details of the supplier of the safety data sheet**
· Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH Tel. +49(0)911-642960
Lechstrasse 28 Fax. +49(0)911-644456
D 90451 Nürnberg e-mail info@akemi.de

· Further information obtainable from: Laboratory
· **1.4 Emergency telephone number:** Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

Antigifcentrum Belgie: 070 245 245
Tox Info Suisse
24-h-Notfallnummer: 145 (aus dem Ausland: +41 44 251 51 51)
Auskunft: +41 44 251 66 66

* **SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**
· Classification according to Regulation (EC) No 1272/2008
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**
· Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.
· Hazard pictograms Void
· Signal word Void

· Hazard-determining components of labelling: Not applicable.
· Hazard statements H412 Harmful to aquatic life with long lasting effects.
· Precautionary statements P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.
· Determination of endocrine-disrupting properties For information on endocrine disrupting properties see section 11.

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## SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· Description: Mixture: consisting of the following components.

· Dangerous components:

| | | | |
|---|---|---|---|
| CAS: 141-02-6<br>EINECS: 205-448-2<br>Reg.nr.: 01-2119486983-19 | bis(2-ethylhexyl)fumarate | Aquatic Chronic 2, H411 | <10% |

· Additional information: For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· General information: Take affected persons out into the fresh air.
Position and transport stably in side position.
No special measures required.
· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact: If skin irritation continues, consult a doctor.
· After eye contact: Rinse opened eye for several minutes under running water.
· After swallowing: Rinse out mouth and then drink plenty of water.
· **4.2 Most important symptoms and effects, both acute and delayed** Headache
Dizziness
Nausea
· **4.3 Indication of any immediate medical attention and special treatment needed** If swallowed, gastric irrigation with added, activated carbon.

## SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
· **5.3 Advice for firefighters**
· Protective equipment: Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.

## SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
· **6.2 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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· **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **6.4 Reference to other sections** No dangerous substances are released.
See Section 7 for information on safe handling.
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** Keep receptacles tightly sealed.
Use only in well ventilated areas.
No special measures required.

· Information about fire - and explosion protection: No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**

· Storage:

· Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
Prevent any seepage into the ground.

· Information about storage in one common storage facility: Store away from oxidising agents.
Store away from foodstuffs.

· Further information about storage conditions: Protect from frost.

· Storage class: 10

· **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs

| **141-02-6 bis(2-ethylhexyl)fumarate** | | |
|---|---|---|
| Dermal | DNEL ( Langzeit-wiederholt) | 42 mg/kg bw/day (ARB) |
| Inhalative | DNEL (Langzeit-wiederholt) | 292 mg/m³ Air (ARB) |

· PNECs

| **141-02-6 bis(2-ethylhexyl)fumarate** | |
|---|---|
| PNEC (wässrig) | 1.1 mg/l (KA) |
| | 0.003 mg/l (SW) |
| | 1 mg/l (WAS) |
| PNEC (fest) | 3.2 mg/kg Trockengew (SWS) |

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

· **8.2 Exposure controls**

· Appropriate engineering controls No further data; see section 7.

· Individual protection measures, such as personal protective equipment

· General protective and hygienic measures: Do not eat, drink, smoke or sniff while working.

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Use skin protection cream for skin protection.
Clean skin thoroughly immediately after handling the product.

· Respiratory protection: Short term filter device:
Filter A/P2

· Hand protection Preventive skin protection by use of skin-protecting agents is recommended.
After use of gloves apply skin-cleaning agents and skin cosmetics.
Skin protection agent recommendation for preventive skin shelter without use of protective gloves:
STOKO EMULSION (http://www.stoko.com)
ARRETIL (http://www.stoko.com)
Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:
STOKO EMULSION (http://www.stoko.com)
Skin protection recommendation for skin cleaning after product handling:
Kresto Classic (http://debstoko.com)
SOLOPOL (http://www.stoko.com)
Skin protection agent recommendation for skin aftercare:
STOKO VITAN (http://www.stoko.com)
The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times´ data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL GmbH in compliance with EN374.
This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves Butyl rubber, BR
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 Value for the permeation: Level ≤ 3, 120 min
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:
Butoject (KCL, Art_No. 897, 898)
Butyl rubber, BR

· As protection from splashes gloves made of the following materials are suitable:
Butoject (KCL, Art_No. 897, 898)
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)
Chloroprene rubber, CR
Camapren (KCL, Art_No. 720, 722, 726)
Butoject (KCL, Art_No. 897, 898)

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| | |
|---|---|
| | Butyl rubber, BR |
| · Not suitable are gloves made of the following materials: | Leather gloves<br>Strong material gloves<br>Nitrile rubber, NBR |
| · Eye/face protection | Goggles recommended during refilling |
| · Body protection: | Protective work clothing |

## SECTION 9: Physical and chemical properties

| | |
|---|---|
| · **9.1 Information on basic physical and chemical properties** | |
| · General Information | |
| · Colour: | Different according to colouring |
| · Odour: | Characteristic |
| · Odour threshold: | Not determined. |
| · Melting point/freezing point: | Undetermined. |
| · Boiling point or initial boiling point and boiling range | 184 °C |
| · Flammability | Not applicable. |
| · Lower and upper explosion limit | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Flash point: | 76 °C |
| · Auto-ignition temperature: | 250 °C |
| · Decomposition temperature: | Not determined. |
| · pH | Not determined.<br>Not applicable |
| · Viscosity: | |
| · Kinematic viscosity at 20 °C | 0 s (DIN 53211/4) |
| · Dynamic: | Not determined. |
| · Solubility | |
| · water: | Not miscible or difficult to mix. |
| · Partition coefficient n-octanol/water (log value) | Not determined. |
| · Vapour pressure: | Not determined. |
| · Density and/or relative density | |
| · Density at 20 °C: | 1.79 g/cm³ ([1,42 - 1,86 g/cm³]) |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |

| | |
|---|---|
| · **9.2 Other information** | |
| · Appearance: | |
| · Form: | Pasty |
| · Important information on protection of health and environment, and on safety. | |
| · Ignition temperature: | Product is not selfigniting. |
| · Explosive properties: | Product does not present an explosion hazard.<br>SADT 50°C |
| · Solvent content: | |
| · Solids content: | 54.5 % |
| · Change in condition | |
| · Evaporation rate | Not determined. |

| | |
|---|---|
| · Information with regard to physical hazard classes | |
| · Explosives | Void |
| · Flammable gases | Void |
| · Aerosols | Void |
| · Oxidising gases | Void |
| · Gases under pressure | Void |

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| | |
|---|---|
| · Flammable liquids | Void |
| · Flammable solids | Void |
| · Self-reactive substances and mixtures | Void |
| · Pyrophoric liquids | Void |
| · Pyrophoric solids | Void |
| · Self-heating substances and mixtures | Void |
| · Substances and mixtures, which emit flammable gases in contact with water | Void |
| · Oxidising liquids | Void |
| · Oxidising solids | Void |
| · Organic peroxides | Void |
| · Corrosive to metals | Void |
| · Desensitised explosives | Void |

## 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 and stored according to specifications. |
| · **10.3 Possibility of hazardous reactions** | Exothermic polymerisation.<br>Reacts with acids.<br>Reacts with strong alkali.<br>Reacts with strong oxidising agents. |
| · **10.4 Conditions to avoid** | No further relevant information available. |
| · **10.5 Incompatible materials:** | No further relevant information available. |
| · **10.6 Hazardous decomposition products:** | Carbon monoxide and carbon dioxide |

## SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

· Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

| **141-02-6 bis(2-ethylhexyl)fumarate** | | |
|---|---|---|
| Oral | LD50 | 29,200 mg/kg (rat) |
| | NOAEL-Werte | ≥1,000 mg/kg (rat) |
| Dermal | LD50 | 18,840 mg/kg (rabbit) |

| | |
|---|---|
| · Skin corrosion/irritation | Based on available data, the classification criteria are not met. |
| · Serious eye damage/irritation | Based on available data, the classification criteria are not met. |
| · Respiratory or skin sensitisation | Based on available data, the classification criteria are not met. |
| · 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. |

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· **11.2 Information on other hazards**

| · Endocrine disrupting properties |
|---|
| None of the ingredients is listed. |

## SECTION 12: Ecological information

· **12.1 Toxicity**

| · Aquatic toxicity: | |
|---|---|
| **141-02-6 bis(2-ethylhexyl)fumarate** | |
| NOEC | 0.76 mg/kg (daphnia magna)<br>0.3 mg/kg (piscis) |

· **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.
· **12.5 Results of PBT and vPvB assessment**
· PBT: Not applicable.
· vPvB: Not applicable.
· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· Additional ecological information:
· General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

## SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· Recommendation Must be specially treated adhering to official regulations.
Smaller quantities can be disposed of with household waste.

| · European waste catalogue | |
|---|---|
| 20 00 00 | MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS |
| 20 01 00 | separately collected fractions (except 15 01) |
| 20 01 27* | paint, inks, adhesives and resins containing hazardous substances |

· Uncleaned packaging:
· Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
· Recommended cleansing agents: Alcohol

## SECTION 14: Transport information

· **14.1 UN number or ID number**
· ADR, ADN, IMDG, IATA Void

· **14.2 UN proper shipping name**
· ADR, ADN, IMDG, IATA Void

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| | |
|---|---|
| · **14.3 Transport hazard class(es)** | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · **14.4 Packing group** | |
| · ADR, IMDG, IATA | Void |
| · **14.5 Environmental hazards:** | |
| · Marine pollutant: | No |
| · **14.6 Special precautions for user** | Not applicable. |
| · **14.7 Maritime transport in bulk according to IMO instruments** | Not applicable. |
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN "Model Regulation": | Void |

## SECTION 15: Regulatory information

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

· Directive 2012/18/EU
· Named dangerous substances - ANNEX I: None of the ingredients is listed.
· REGULATION (EC) No 1907/2006 ANNEX XVII: Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.

· Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· VOC EU 0.0 g/l

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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### 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.
This Safety Data Sheets is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· Department issuing SDS: Laboratory
· Date of previous version: 20.12.2022
· Version number of previous version: 3
· 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 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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
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