

MULTIFUGE Diamond Max

Multi-purpose reaction resin grout 3c

Botament



MULTIFUGE Diamond Max is a multi-purpose reaction resin grout and adhesive 3c for wall and floor coverings in interior and exterior areas. Beside the typical application areas in the industrial and high-quality sector the material is amongst others suitable for premium coverings such as e.g. in wellness centres, for exclusive bathroom design, for barrier-free showers and in swimming pools.

PROPERTIES

- For joint widths from 2 - 10 mm
- High colour brilliance
- Excellent handling properties
- Easy to wash with cold water
- Long working time
- Specially fine joint surface
- For areas subject to high mechanical and chemical stress
- Stable to abrasion and high-pressure cleaners
- Resistant to household detergents
- Water and dirt repellent
- Very high flank adhesion
- Reaction resin joint mortar RG according to EN 13888
- Reaction resin adhesive R2 T according to EN 12004

AREAS OF APPLICATION

Due to its enormous range of applications in private, commercial and industrial areas MULTIFUGE Diamond Max is among others suitable for:

- swimming pools, wellness centres, vapour-baths and showers
- premium and exclusive wall and floor coverings
- barrier-free showers
- industrial kitchens
- drinks industry
- food industry
- chemical industry
- car and truck wash
- coverings on balconies and terraces in combination with the Terrachamp system

Suitable

for the grouting of

- vitreous and porcelain stoneware
- glass mosaics
- split tiles
- floor clinker slabs
- heavy clay
- ceramic mosaics

for the bonding of

- tiles and slabs
- glass mosaics

SUBSTRATE PREPARATION

The grouting should be exclusively done when the adhesive bed has dried out. In case of standing wetness drying measures must be taken.

The joints must be cleared of any bonding material, separating agents and dirt.

APPLICATION

- put component A, B and C into the supplied plastic bucket and mix with a slowly rotating agitator for at least 3 minutes
- so as to avoid mixing mistakes re-pot MULTIFUGE Diamond Max into a clean container (scrape container clean thoroughly) and mix again

Use of MULTIFUGE Diamond Max as joint mortar

- perform jointing using a special epoxy jointing trowel
- pre-wash surface with a hydro sponge (on profiled coverings use a soft fleece sponge) and then finish with a thorough final wash (wash until clear)
- use little water for washing and change washing water regularly
- do not mix material that has started to set again

The mixing ratio specified by the factory must be adhered to. In case of laying tiles with rectified edges onto wall areas we recommend to start washing earliest after 10- 20 minutes.

Use of MULTIFUGE Diamond Max as tile adhesive

- apply MULTIFUGE Diamond Max with the notched side of the trowel (regard open time)
- press tiles using light pressure and a side-to-side movement into the adhesive bed and position

For the setting of MULTIFUGE Diamond Max as a stable adhesive add ~ 0.5 % TX Thixotroping Agent to the ready mixed material.

Mixing up partial quantities

component	A	B	C
$\frac{3}{4}$ packaging	0.483 kg	0.191 kg	1.95 kg
$\frac{1}{2}$ packaging	0.322 kg	0.128 kg	1.30 kg
$\frac{1}{4}$ packaging	0.161 kg	0.064 kg	0.65 kg

CONSUMPTION

Consumption joint mortar

tile format (cm)	joint width (mm)	joint depth (mm)	consumtion (kg/m ²)
24,5 x 11,5	8	10	1.86
10 x 10	5	8	1.33
20 x 20	5	8	0.67
2 x 2 (mosaic)	3	3	1.26
60 x 60	3	10	0.20

To calculate further consumption values please use our joint consumption calculator at www.botament.com.

Consumption adhesive mortar

6 mm notched trowel	~ 2.8 kg/m ²
8 mm notched trowel	~ 3.6 kg/m ²

IMPORTANT ADVISORIES

When installing ceramic coverings all applicable standards and guidelines must be observed in their current versions.

MULTIFUGE Diamond Max has to be protected from rain while being in fresh condition.

In exterior areas, small, partial bulges may occur in epoxy resin joints from case to case due to expanding air pockets under the tile covering when the temperature rises. We therefore recommend that the

IMPORTANT ADVISORIES

grouting work is carried out following behind the course of the sun. When laying the tiles with cement-based mortars, make sure that the bedding is low in hollow spaces.

During application the air and substrate temperatures must be at least + 10 °C. Temperatures falling below this threshold limit but staying above freezing at night are uncritical once application is complete. If the minimum temperature goes below the limit enduring after the application the tiling has to be encased and heated directly after finishing work.

Tile coverings subject to heavy loads must be planned and executed as maintenance areas.

For the purpose of matching the requirement profile of the respective project with the technical data of MULTIFUGE Diamond Max with regard to mechanical, thermal and chemical loading please contact our department application technology.

The water in swimming pools must be prepared in accordance with current standards and regulations. Deviations from the values stipulated therein may lead to damage to the joint materials.

As slight colour variations may occur between different batches it is recommended using only material from one batch per area fitted.

Joint mortar residue may deposit in tiles that are rough or have an open-pore structure.

Should residual streaks be found the day after fitting on smooth surfaces such as porcelain stoneware, these can easily be washed off using a vinegar-based cleaning agent. At a later stage the removal of such streaks becomes much harder.

When fitting tile coverings it is important to apply MULTIFUGE Diamond Max across the entire surface to make full use of its impregnating effect.

A glossy film that may potentially be left behind after the area has been washed – which is typical for reaction resin mortars – will disappear over time in the course of natural weather impact, maintenance cleaning and general use of the area.

To achieve optimal results we recommend conducting a site-specific test sample prior to installation.

People with sensitive skin may experience an allergic reaction when working with reaction resin materials. To avoid skin contact we therefore recommend wearing suitable protective clothing.

Ensure adequate ventilation and airing of the site when using MULTIFUGE Diamond Max.

Application in combination with the Terrachamp system

MULTIFUGE Diamond Max enables the grouting of coverings on balconies and terraces which have been applied with BTK200 Terrachamp directly onto Botament composite sealants.

Further technical details can be found in our technical data sheet to BTK200 Terrachamp.

MULTIFUGE Diamond Max has been designed exclusively for commercial users.

The amount of empty space in the packaging of component A and B is due to technical reasons. The amount of liquid contained corresponds exactly to the required mixing ratio for the product.

The safety data sheet is available for download at www.botament.com.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	kg/dm ³	~ 1.7	
Thermal resistance	°C	> -30 < 70	dry heat
Mixing ratio	kg:kg	18.4 : 7.3 : 74.3	comp. A : comp. B : comp. C
Working time	minutes	~ 80	
Open time	minutes	~ 60	
Accessible after	hours	~ 14	
Resilient after (mechanically)	days	~ 3	
Resilient after (chemically)	days	~ 7	
Application conditions	°C	> 10 < 25	

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

base	3-component epoxy resin system
colour shade	white (no. 10), pergamon (no. 11), sand grey (no. 15), silver grey (no. 16), grey (no. 24), titanium grey (no. 25), anthracite (no. 26), basalt (no. 27), jurassic beige (no. 35), cocoa (no. 38), havana (no. 40), mocha (no. 41)
delivery form	3.5 kg unit
	in the box: 0.644 kg component (A) 0.255 kg component (B)
	in the bucket: 2.6 kg coloured sand (C)
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs. Protect from frost. The coloured sand (comp. C) can be stored for 30 months in its original packaging.
Cleaning agent	dilution
GISCODE : RE50	

Note: The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2300012967]

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

Printing date 21.04.2023

Version number 30 (replaces version 29)

Revision: 21.04.2023

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

· **1.1 Product identifier**

· **Trade name** *Multifuge Diamond MAX - Komponente A*

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

· **Product category** *PC9a Coatings and paints, thinners, paint removers*

· **Application of the substance / the mixture** *Epoxy resin adhesive*

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:** *BOTAMENT Systembaustoffe
Am Kruppwald 1
D-46238 Bottrop*

*Tel.: ++49(0)2041 101-90
Fax.: ++49(0)2041 101-988*

· **Informing department:** *Product safety department.
msds@botament.com*

· **1.4 Emergency telephone number:** *Tel.: +49 / (0)700 24112112 (MCR)
Tel.: +48612864565*

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 Toxic 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 GB CLP regulation.*

· **Hazard pictograms**



GHS07 GHS09

· **Signal word**

Warning

· **Hazard-determining components of labelling:**

*epoxide derivatives
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1;2)
Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)] dioxirane and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl) oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)] dioxirane
oxirane, mono[(C12-14-alkyloxy)methyl] derivs
H315 Causes skin irritation.*

· **Hazard statements**

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- **Precautionary statements**
 - H319 Causes serious eye irritation.
 - H317 May cause an allergic skin reaction.
 - H411 Toxic to aquatic life with long lasting effects.
 - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves / eye protection / face protection.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 - P337+P313 If eye irritation persists: Get medical advice/attention.
- **Additional information:** Contains epoxy constituents. May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Resin mixture with colouring agents.
Mixture consisting of the following components.
As listed below filled with sand CAS Nr. 14808-60-7

· **Dangerous components:**

CAS: 1675-54-3 EINECS: 216-823-5	epoxide derivates Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	30-60%
CAS: 933999-84-9	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1;2) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	30-60%
EC number: 701-263-0	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	≥2.5-<10%
CAS: 68609-97-2 EINECS: 271-846-8	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Skin Irrit. 2, H315; Skin Sens. 1, H317, EUH205	≥1-<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**
- **After inhalation** Supply fresh air.

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- **After skin contact** *Instantly wash with water and soap and rinse thoroughly.*
- **After eye contact** *Rinse opened eye for several minutes under running water.
Seek medical treatment.*
- **After swallowing** *Rinse out mouth and then drink plenty of water.
Seek medical treatment.*
- **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 fighting measures that suit the environment.*
- **5.2 Special hazards arising from the substance or mixture** *No further relevant information available.*
- **5.3 Advice for firefighters**
- **Protective equipment:** *No special measures required.*

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** *Not required.*
- **6.2 Environmental precautions:** *Prevent material from reaching sewage system, holes and cellars.*
- **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** *See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.*

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** *Store in cool, dry place in tightly closed containers.
Open and handle container with care.*
- **Information about protection against explosions and fires:** *No special measures required.*

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class** 10
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with critical 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**

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Oral	DNEL	1 mg/kg bw/Tag (ArL)
Dermal	DNEL	1.7 mg/kg bw/day (ArL)
Inhalative	DNEL	0.98 mg/m ³ (ArL)

· **PNECs**

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

PNEC	0.00072 mg/l (Mew)
	0.0072 mg/l (Suw)
PNEC	80.12 mg/kg dwt (Bod)
	6.677 mg/kg dwt (Sediment)
	66.77 mg/kg dwt (Fresh water sediment)

- **Additional information:** The lists that were valid during the compilation 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**

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

· **Hand protection**

Protective gloves.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

After use of gloves apply skin-cleaning agents and skin cosmetics.
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

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several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· **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.

Nitril $\geq 0,40$ mm ≥ 480 min

· **Eye/face protection**

Safety glasses

Tightly sealed safety glasses.

· **Body protection:**

Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Colour:**

According to product specification

· **Smell:**

Characteristic

· **Melting point/freezing point:**

Not determined

· **Boiling point or initial boiling point and boiling range**

Not determined

· **Flash point:**

>150 °C

· **Auto-ignition temperature:**

184 °C

· **pH**

Not determined.

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **dynamic at 20 °C:**

16800 mPas

· **Solubility**

· **Water:**

Not miscible or difficult to mix

· **Steam pressure at 20 °C:**

0.1 hPa

· **Density and/or relative density**

· **Density at 20 °C**

1.1 g/cm³

· **9.2 Other information**

· **Appearance:**

· **Form:**

Fluid

· **Important information on protection of health and environment, and on safety.**

· **Self-inflammability:**

Product is not selfigniting.

· **Explosive properties:**

Product is not explosive.

· **Information with regard to physical hazard classes**

· **Explosives**

Void

· **Flammable gases**

Void

· **Aerosols**

Void

· **Oxidising gases**

Void

· **Gases under pressure**

Void

· **Flammable liquids**

Void

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- **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 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:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

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 that are relevant for classification:

1675-54-3 epoxide derivatives

Dermal LD50 23000 mg/kg (rabbit)

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Oral LD50 17100 mg/kg (rat)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **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.

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- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

78-93-3 butanone

List II

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

1675-54-3 epoxide derivates

IC50	>42.6 mg/l (Bak)
LC50/96h	2 mg/l (Oncorhynchus mykiss)
EC50/48h	1.8 mg/l (Daphnia magna)
ErC50/72h	11 mg/l (Selenastrum capricornutum)

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

EbC50/72h	843 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>5000 mg/l (Oncorhynchus mykiss) 1800 mg/l (Lepomis macrochirus)
EC50	>100 mg/l (BEL)
NOEC	500 mg/l (Pseudokirchneriella subcapitata)

· **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**

For information on endocrine disrupting properties see section 11.

· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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· **Uncleaned packagings:**

· **Recommendation:**

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

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

UN3082

· **14.2 UN proper shipping name**

· **ADR, IATA**

ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (epoxide derivates)

· **IMDG**

ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (epoxide derivates),
MARINE POLLUTANT

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class**

9 (M6) Miscellaneous dangerous substances and
articles.

· **Label**

9

· **IMDG, IATA**

· **Class**

9 Miscellaneous dangerous substances and
articles.

· **Label**

9

· **14.4 Packing group**

· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**

· **Marine pollutant:**

Yes

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and
articles.

· **Kemler Number:**

90

· **EMS Number:**

F-A, S-F

· **Stowage Category**

A

· **14.7 Maritime transport in bulk according to
IMO instruments**

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

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· Transport category	3
· Tunnel restriction code	(-)
· 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 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE DERIVATES), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
 - H315 Causes skin irritation.
 - H317 May cause an allergic skin reaction.
 - H319 Causes serious eye irritation.
 - H411 Toxic to aquatic life with long lasting effects.
 - H412 Harmful to aquatic life with long lasting effects.
 - EUH205 Contains epoxy constituents. May produce an allergic reaction.
- **Department issuing data specification sheet:** Environment protection department.
- **Contact:** Abteilung Produktsicherheit
- **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

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according to 1907/2006/EC, Article 31

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Version number 30 (replaces version 29)

Revision: 21.04.2023

Trade name Multifuge Diamond MAX - Komponente A

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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 (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

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

Skin Sens. 1: Skin sensitisation – 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

· *** Data compared to the
previous version altered.**

GB

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

Printing date 12.05.2023

Version number 24 (replaces version 23)

Revision: 12.05.2023

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

· **1.1 Product identifier**

· **Trade name**

Multifuge Diamond MAX - Komponente B

· **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**

Epoxy resin adhesive

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

BOTAMENT Systembaustoffe
Am Kruppwald 1
D-46238 Bottrop

Tel.: ++49(0)2041 101-90
Fax.: ++49(0)2041 101-988

· **Informing department:**

Product safety department.
msds@botament.com

· **1.4 Emergency telephone number:**

Tel.: +49 / (0)700 24112112 (MCR)
Tel.: +48612864565

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

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 GB CLP regulation.

· **Hazard pictograms**



GHS05 GHS07

· **Signal word**

Danger

· **Hazard-determining components of labelling:**

Isophorone diamine
Tall oil, reaction product with TEPA
Polyoxypropylenediamine
3-aminopropyldimethylamine
3,6,9-triazaundecamethylenediamine

· **Hazard statements**

H314 Causes severe skin burns and eye damage.

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Precautionary statements

H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
P260 Do not breathe dusts or mists.
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.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture consisting of the following components.

Dangerous components:

CAS: 2855-13-2	Isophorone diamine Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	30-60%
CAS: 68555-22-6	Tall oil, reaction product with TEPA Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≥20-≤30%
CAS: 106906-26-7	Fatty acids, C18-unsatd., Dimers, oligomeric reaction products with 4,4'-Isopropylidenediphenol-1-chloro-2,3-epoxypropane co- oligomer, Tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	≥10-≤25%
CAS: 9046-10-0	Polyoxypropylenediamine Skin Corr. 1B, H314; Aquatic Chronic 3, H412	≥5-≤10%
CAS: 2855-13-2 EINECS: 220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1A, H317 ATE: LD50 oral: 1030 mg/kg Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	≥1-≤3%
CAS: 109-55-7 EINECS: 203-680-9	3-aminopropyldimethylamine Flam. Liq. 3, H226; Acute Tox. 3, H311; Skin Corr. 1B, H314; Acute Tox. 4, H302; Skin Sens. 1, H317	≥0.1-≤1%

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CAS: 112-57-2	3,6,9-triazaundecamethylenediamine	≥0.25-<1%
EINECS: 203-986-2	Skin Corr. 1B, H314; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1B, H317	

· **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** Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air; consult doctor in case of symptoms.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
Call a doctor immediately.
- **After swallowing** Drink copious amounts of water and provide fresh air. Instantly call for doctor.

· 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 fighting measures that suit the environment.

· 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

· 5.3 Advice for firefighters

· **Protective equipment:** Put on breathing apparatus.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Prevent material from reaching sewage system, holes and cellars.

· 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 of 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
See Section 8 for information on personal protection equipment.

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See Section 13 for information on disposal.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed containers.
Open and handle container with care.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class** 8A
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with critical 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**

2855-13-2 Isophorone diamine

Oral	DNEL	0.526 mg/kg bw/Tag (ArL)
Inhalative	DNEL	20.1 mg/m ³ (ArL)

9046-10-0 Polyoxypropylenediamine

Oral	DNEL	0.04 mg/kg bw/Tag (ArL)
Dermal	DNEL	2.5 mg/kg bw/day (ArL)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral	DNEL	0.526 mg/kg bw/Tag (ArL)
Inhalative	DNEL	20.1 mg/m ³ (ArL)

112-57-2 3,6,9-triazaundecamethylenediamine

Oral	DNEL	0.53 mg/kg bw/Tag (ArL)
Dermal	DNEL	0.74 mg/kg bw/day (ArL)
Inhalative	DNEL	6940 mg/m ³ (ArL)

· **PNECs**

2855-13-2 Isophorone diamine

PNEC	0.006 mg/l (Mew)
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	0.06 mg/l (Suw)
PNEC	0.578 mg/kg dwt (Sediment)
	5.784 mg/kg dwt (Fresh water sediment)
9046-10-0 Polyoxypropylenediamine	
PNEC	7.5 mg/l (Sewage Treatment Plant)
	0.015 mg/l (Fresh water)
PNEC	0.0176 mg/kg dwt (Bod)
	0.125 mg/kg dwt (Sediment)
	0.132 mg/kg dwt (Fresh water sediment)
2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine	
PNEC	0.006 mg/l (Mew)
	0.06 mg/l (Suw)
PNEC	0.578 mg/kg dwt (Sediment)
	5.784 mg/kg dwt (Fresh water sediment)
112-57-2 3,6,9-triazaundecamethylenediamine	
PNEC	9.73 mg/l (BEL)
	0.0068 mg/l (Fresh water)
	0.0068 mg/l (Mew)
PNEC	0.343 mg/kg dwt (Sediment)
	3.43 mg/kg dwt (Fresh water sediment)

· **Additional information:** The lists that were valid during the compilation 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**

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

· **Hand protection**

Protective gloves.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
After use of gloves apply skin-cleaning agents and skin cosmetics.

· **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.
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.4 mm

· **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.
Nitril $\geq 0,40$ mm ≥ 480 min

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- **Eye/face protection** Safety glasses
Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

- **Colour:** Yellow
- **Smell:** Characteristic
- **Melting point/freezing point:** Not determined
- **Boiling point or initial boiling point and boiling range** 205 °C
- **Lower and upper explosion limit**
- **Lower:** 1.3 Vol %
- **Upper:** 13 Vol %
- **Flash point:** >100 °C
- **Auto-ignition temperature:** 380 °C
- **pH** Not determined.
- **Viscosity:**
- **Kinematic viscosity** Not determined.
- **dynamic:** Not determined.
- **Solubility**
- **Water:** Not miscible or difficult to mix
- **Steam pressure at 20 °C:** 0.1 hPa
- **Density and/or relative density**
- **Density at 20 °C** 0.94 g/cm³

· **9.2 Other information**

- **Appearance:**
- **Form:** Fluid
- **Important information on protection of health and environment, and on safety.**
- **Self-inflammability:** Product is not selfigniting.
- **Explosive properties:** Product is not explosive.

· **Information with regard to physical hazard classes**

- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void

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- **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 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:**
No further relevant information available.
- **10.6 Hazardous decomposition products:**
No dangerous decomposition products known

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 that are relevant for classification:

2855-13-2 Isophorone diamine

Oral	LD50	1030 mg/kg (ATE)
		1030 mg/kg (rat)
Dermal	NOAEL	250 mg/kg (rat)
	LD50	1840 mg/kg (rabbit)
		>2000 mg/kg (rat)

9046-10-0 Polyoxypropylenediamine

Oral	LD50	2855 mg/kg (Rat)
Dermal	LD50	2980 mg/kg (Kan)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral	LD50	1030 mg/kg (ATE)
		1030 mg/kg (rat)
Dermal	NOAEL	250 mg/kg (rat)
	LD50	1840 mg/kg (rabbit)
		>2000 mg/kg (rat)

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109-55-7 3-aminopropyldimethylamine

Oral	LD50	1600 mg/kg (rat)
Dermal	LD50	490 mg/kg (rbt)
Inhalative	LC50/4 h	24.8 mg/l (rat)

112-57-2 3,6,9-triazaundecamethylenediamine

Oral	LD50	2140 mg/kg (rat)
Dermal	LD50	1260 mg/kg (rabbit)

- **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.
- **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** May cause respiratory irritation.
- **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.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

2855-13-2 Isophorone diamine

LC50/96h	110 mg/l (Leucidus idus)
EC50	1120 mg/l (Pseudomonas putida)
EC50/48h	23 mg/l (Daphnia magna)
NOEC	1.5 mg/l (Desmodesmus subspicatus)
	3 mg/l (Daphnia magna)
ErC50/72h	>50 mg/l (Desmodesmus subspicatus)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

LC50/96h	110 mg/l (Leucidus idus)
EC50	1120 mg/l (Pseudomonas putida)
EC50/48h	23 mg/l (Daphnia magna)
NOEC	1.5 mg/l (Desmodesmus subspicatus)
	3 mg/l (Daphnia magna)
ErC50/72h	>50 mg/l (Desmodesmus subspicatus)

109-55-7 3-aminopropyldimethylamine

EC50/72h	53.5 mg/l (algae)
LC50/96h	122 mg/l (fish)

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EC50/48h	59.5 mg/l (Daphnia magna)
112-57-2 3,6,9-triazaundecamethylenediamine	
EC50/72h	2.1 mg/l (algae)
LC50/96h	420 mg/l (Gup)
EC50/48h	24.1 mg/l (Daphnia magna)

- **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 product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR, IMDG, IATA	UN2735
· 14.2 UN proper shipping name	
· ADR, IMDG, IATA	AMINES, LIQUID, CORROSIVE, N.O.S. (Isophorone diamine, Polyoxypropylenediamine)
· 14.3 Transport hazard class(es)	
· ADR	
· Class	8 (C7) Corrosive substances.
· Label	8
· IMDG, IATA	
· Class	8 Corrosive substances.

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· Label	8
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · Kemler Number: · EMS Number: · Segregation groups · Stowage Category · Segregation Code	Warning: Corrosive substances. 80 F-A, S-B (SGG18) Alkalies A SG35 Stow "separated from" SGG1-acids
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category · Tunnel restriction code	2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (I S O P H O R O N E D I A M I N E , POLYOXYPROPYLENEDIAMINE), 8, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **15.2 Chemical safety assessment:**

No further relevant information available.

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases** H226 Flammable liquid and vapour.

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H302 Harmful if swallowed.
H311 Toxic in contact with skin.
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.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· Department issuing data specification sheet:

· Abbreviations and acronyms:

Environment protection department.

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 (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 3: Acute toxicity – Category 3

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

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

Skin Sens. 1A: Skin sensitisation – Category 1A

Skin Sens. 1B: Skin sensitisation – Category 1B

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

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

· * Data compared to the previous version altered.

Awarding of licence for the use of EMICODE

Licence Number: 12540/15.01.10
For the product BOTAMENT Multifuge Diamond Max
Of company BOTAMENT Systembaustoffe GmbH & Co. KG
Due to application date October 20, 2020

With reference to the classification in accordance with the directives as stipulated in § 10 of the GEV trademark constitution

on behalf of the GEV for the above mentioned product as per § 5, section 4 of the GEV trademark constitution is awarded the licence for the use of the GEV trademark



This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.

OM 063 October 20, 2020
valid until October 20, 2025

The Secretary General
Association for the Control of Emissions in Products
for Flooring Installation, Adhesives and Building Materials (GEV)
Völklinger Straße 4 · D-40219 Düsseldorf

Requirement guidelines for the awarding of the EMICODE licence

The product mentioned on the front side of the licence has to fulfil among others the following criteria in accordance with the Constitution and the guidelines of the Technical Advisory Board of the GEV:

- The product meets all the legal requirements, especially the chemical laws and their specifications.
- The product is solvent free as specified in clause 2.4 of the "GEV Classification Criteria", except if it is a surface treatment product. If the product is assigned to a GISCODE product group then this can be labelled.
- A safety data sheet (SDS) according to local law in its respectively valid version is issued for the product.
- Carcinogenic, mutagenic, reprotoxic substances of the categories 1A or 1B are not added during the manufacture of the product.
- The testing of the product is performed in accordance with the GEV Testing Method. VOC determination is performed in a test chamber followed by the Tenax / thermal desorption procedures with subsequent GC/MS analysis.
- The assignment of an EMICODE class is performed according to the following criteria and TVOC/TSVOC concentration levels. The corresponding EMICODE class shall be used to label the product:

1) Installation products, adhesives and construction products

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
TVOC after 3 days	≤ 750	≤ 1000	≤ 3000
TVOC after 28 days	≤ 60	≤ 100	≤ 300
TSVOC after 28 days	≤ 40	≤ 50	≤ 100
R value based on German AgBB LCI (NIK) after 28 days	1	-	-
Sum of non-assessable VOC	≤ 40	-	-
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Sum of form- and acetaldehyde	≤ 0.05 ppm	≤ 0.05 ppm	≤ 0.05 ppm
Sum of volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

2) Products for floor surface treatments for parquet, mineral floors and resilient floorings

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
Sum TVOC + TSVOC after 28 days	≤ 100 thereof max. 40 SVOC	≤ 150 thereof max. 50 SVOC	≤ 450 thereof max. 100 SVOC
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Any volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1