



BE SURE. BUILD SURE.

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

Printing date 25.10.2021

Version number 5

Revision: 19.10.2021

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

1.1 Product identifier

Trade name **MC-Estrifan Color Protect Pro - Komponente B**

Article number: 4387

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

Coating compound/ Surface coating/ paint
Hardening agent/ Curing agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: MC-Bauchemie Müller GmbH & Co. KG
Am Kruppwald 1-8
D-46238 Bottrop
Tel.: +49(0)2041-101-0
Fax.: +49(0)2041-101-400
E-Mail: info@mc-bauchemie.de

MC-Bauchemie AG
Hagackerstr. 10
CH-8953 Dietikon
Tel.: +44-7400510
Fax : +44-7400533

Informing department: msds@mc-bauchemie.de

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 Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

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



GHS07

Signal word

Warning

Hazard-determining

components of labelling: Aliphatisches Polyisocyanat

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- **Hazard statements** *Hydrophiles, aliphatisches Polyisocyanat
hexamethylene diisocyanate
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.*
- **Precautionary statements** *P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye
protection/face protection/hearing protection.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/
attention.
P403+P233 Store in a well-ventilated place. Keep container tightly
closed.*
- **Additional information:** *Contains isocyanates. 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 Chemical characterisation: Mixtures**
- **Description:** *Mixture consisting of the following components.*

· **Dangerous components:**

CAS: 28182-81-2	<i>Aliphatisches Polyisocyanat Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335</i>	<i>70-100%</i>
CAS: 666723-27-9	<i>Hydrophiles, aliphatisches Polyisocyanat Acute Tox. 3, H331; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412</i>	<i>≥2.5-<20%</i>
CAS: 822-06-0 EINECS: 212-485-8 Reg.nr.: 01-2119457571-37- 0000	<i>hexamethylene diisocyanate Acute Tox. 2, H330; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335</i>	<i>≥0.1-<0.5%</i>

- **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.*
- **After skin contact** *Instantly wash with water and soap and rinse thoroughly.*
- **After eye contact** *Rinse opened eye for several minutes under running water. If
symptoms persist, consult doctor.*
- **After swallowing** *Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.*

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- **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** CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **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:** Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **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.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical systems:** No further data; see item 7.

· **Components with critical values that require monitoring at the workplace:**

822-06-0 hexamethylene diisocyanate

OEL (Ireland) Long-term value: 0.005 ppm
as -NCO, Sens

· **DNELs**

28182-81-2 Aliphatisches Polyisocyanat

Inhalative DNEL 0.5 mg/m³ (Workers) (long term local)
1 mg/m³ (kei) (acute local eff)

822-06-0 hexamethylene diisocyanate

Inhalative DNEL 0.5 mg/m³ (ArL)

· **PNECs**

28182-81-2 Aliphatisches Polyisocyanat

PNEC 12.7 µg/l (Daphnia magna) (marine)

PNEC 38.28 mg/l (kei) (STP)

822-06-0 hexamethylene diisocyanate

PNEC 100 mg/l (Sewage Treatment Plant)

0.0199 mg/l (Mew)

0.199 mg/l (Suw)

PNEC 8884 mg/kg dwt (Bod)

4455 mg/kg dwt (Marine water sediment)

44551 mg/kg dwt (Fresh water sediment)

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.

· **Breathing equipment:**

Respiratory protection is required at inadequately ventilated workplaces and during spray processing. Fresh air masks or combination filters A2-P2 are recommended for short-term work.

· **Protection of hands:**

Conditionally suitable materials for protective gloves; EN 374-3:
Nitrile rubber - NBR: Thickness ≥ 0.35mm.

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- **Material of gloves**
- **Penetration time of glove material**
- **Eye protection:**
- **Body protection:**

Only suitable for splash protection. Only suitable for short-term exposure. In case of contamination, the protective gloves must be changed immediately.
Nitrile rubber, NBR

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Safety glasses
Tightly sealed safety glasses.
Protective work clothing.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid
Colour: Colourless
Smell: Characteristic

· pH-value at 20 °C: 7

· Change in condition

Melting point/freezing point: Not determined
Initial boiling point and boiling range: 122 °C

· Flash point: Not applicable

· Self-inflammability: Product is not selfigniting.

· Explosive properties: Product is not explosive.

· Density at 20 °C 1.15 g/cm³

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix

· Viscosity:

dynamic at 20 °C: 2000 mPas

· 9.2 Other information No further relevant information available.

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

Reacts with amines

· 10.4 Conditions to avoid

No further relevant information available.

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- **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 toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**

28182-81-2 Aliphatisches Polyisocyanat

Oral	LD50	>2500 mg/kg (rat) (OECD 423)
Dermal	LD50	>2000 mg/kg (rat) (OECD 402)

666723-27-9 Hydrophiles, aliphatisches Polyisocyanat

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)

822-06-0 hexamethylene diisocyanate

Oral	LD50	738 mg/kg (rat)
Inhalative	LC50/4 h	0.39 mg/l (rat)

- **Primary irritant effect:**
- **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** May cause an allergic skin reaction.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

28182-81-2 Aliphatisches Polyisocyanat

ErC10/72h	370 mg/l (Desmodesmus subspicatus) (EU C.3)
ErC50/72h	>1000 mg/l (Desmodesmus subspicatus) (EU C.3)

666723-27-9 Hydrophiles, aliphatisches Polyisocyanat

LC50/96h	35.2 mg/l (Danio rerio)
EC50	>10000 mg/l (BEL)

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EC50/48h	>100 mg/l (<i>Daphnia magna</i>)
ErC50/72h	72 mg/l (<i>Desmodesmus subspicatus</i>)

- **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.*
- **Ecotoxicological effects:**
- **Remark:** *Harmful to fish*
- **Additional ecological information:**
- **General notes:** *Harmful to aquatic organisms
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.*
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **12.6 Other adverse effects** *No further relevant information available.*

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.*
- **Recommended cleaning agent:** *Solvent naphtha*

SECTION 14: Transport information

- | | |
|---|-------------|
| · 14.1 UN-Number
· ADR, ADN, IMDG, IATA | <i>Void</i> |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | <i>Void</i> |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | <i>Void</i> |
| · 14.4 Packing group
· ADR, IMDG, IATA | <i>Void</i> |
| · 14.5 Environmental hazards:
· Marine pollutant: | <i>No</i> |

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- **14.6 Special precautions for user** *Not applicable.*
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** *Not applicable.*
- **UN "Model Regulation":** *Void*

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture** *No further relevant information available.*

- **Directive 2012/18/EU**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** *Conditions of restriction: 3, 74*

- **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.

- **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** *H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.*

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H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

· **Department issuing data specification sheet:**

Environment protection department.

· **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

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

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

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

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

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