



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 18 (replaces version 17)

Revision: 08.07.2023

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

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

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



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- **Signal word** Warning
- **Hazard-determining components of labelling:** *Hydrophiles, aliphatisches Polyisocyanat
Hexamethylen-1,6-diisocyanat Homopolymer
hexamethylene diisocyanate*
- **Hazard statements** *H332 Harmful if inhaled.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.*
- **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 Mixtures**
- **Description:** *Mixture consisting of the following components.*

· **Dangerous components:**

CAS: 160994-68-3	<i>Hydrophiles, aliphatisches Polyisocyanat Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412, EUH204</i>	80-100%
CAS: 3779-63-3 EINECS: 223-242-0	<i>Hexamethylen-1,6-diisocyanat Homopolymer Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335</i>	≥1-<10%
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, EUH204 Specific concentration limits: Resp. Sens. 1; H334: C ≥0.5 % Skin Sens. 1; H317: C ≥0.5 %</i>	<0.1%

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· **Additional information**

For the wording of the listed hazard phrases refer to section 16.

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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.

· **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.

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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**
 - 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.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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:

822-06-0 hexamethylene diisocyanate

WEL	Short-term value: 0.07 mg/m ³
	Long-term value: 0.02 mg/m ³
	Sen; as -NCO

· DNELs

822-06-0 hexamethylene diisocyanate

Inhalative	DNEL	0.5 mg/m ³ (ArL)
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· PNECs

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)

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· Ingredients with biological limit values:

822-06-0 hexamethylene diisocyanate

BMGV	1 µmol creatinine/mol
	Medium: urine
	Sampling time: At the end of the period of exposure
	Parameter: isocyanate-derived diamine

· 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

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.

· Hand protection

Conditionally suitable materials for protective gloves; EN 374-3: Nitrile rubber - NBR: Thickness ≥ 0.35mm.
Only suitable for splash protection. Only suitable for short-term exposure. In case of contamination, the protective gloves must be changed immediately.

· Material of gloves

Nitrile rubber, NBR

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection

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:	Colourless
· Smell:	Characteristic
· Melting point/freezing point:	Not determined
· Boiling point or initial boiling point and boiling range	175 °C
· Flash point:	70 °C
· pH at 20 °C	7
· Viscosity:	
· Kinematic viscosity	Not determined.
· dynamic at 20 °C:	2000 mPas
· Solubility	
· Water:	Not miscible or difficult to mix

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- **Steam pressure:** Not determined.
- **Density and/or relative density**
- **Density at 20 °C** 1.15 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
- **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** Reacts with amines
- **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

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SECTION 11: Toxicological information

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

· Acute toxicity Harmful if inhaled.

· LD/LC50 values that are relevant for classification:

160994-68-3 Hydrophiles, aliphatisches Polyisocyanat

Oral LD50 >2000 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rat)

Inhalative LC50/4 h 0.39 mg/l (rat)

822-06-0 hexamethylene diisocyanate

Oral LD50 738 mg/kg (rat)

Inhalative LC50/4 h 0.39 mg/l (rat)

· Skin corrosion/irritation Causes skin 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 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:

160994-68-3 Hydrophiles, aliphatisches Polyisocyanat

LC50/96h 28.3 mg/l (Danio rerio)

EC50 >10000 mg/l (BEL)

EC50/48h >100 mg/l (Daphnia magna)

ErC50/72h >100 mg/l (Scenedesmus subspicatus)

· 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.

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· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse 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.

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 or ID number**

· **ADR, ADN, IMDG, IATA**

Void

· **14.2 UN proper shipping name**

· **ADR, ADN, IMDG, IATA**

Void

· **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.

· **UN "Model Regulation":**

Void

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SECTION 15: Regulatory information

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

No further relevant information available.

· **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.
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.
EUH204 Contains isocyanates. May produce an allergic reaction.

· **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 (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
Acute Tox. 2: Acute toxicity – Category 2
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

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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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