



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

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

- **Product identifier**
- **Trade name** MC-Estrifan Color Protect Pro - Komponente B
- **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*
- **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*
- **Emergency telephone number:** *Tel.: +49 / (0)700 24112112 (MCR)
Tel.: +48612864565*

2 Hazards identification

- **Classification of the substance or mixture**
*Flam. Liq. 4 H227 Combustible liquid.
Acute Tox. 5 H303 May be harmful if swallowed.
Acute Tox. 5 H313 May be harmful in contact with skin.
Acute Tox. 5 H333 May be harmful if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.*
- **Label elements**
- **GHS label elements** *The product is classified and labelled according to the Globally Harmonised System (GHS).*
- **Hazard pictograms**

GHS07
- **Signal word** *Warning*

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- **Hazard-determining components of labelling:** Aliphatisches Polyisocyanat
Hydrophiles, aliphatisches Polyisocyanat
hexamethylene diisocyanate
- **Hazard statements** Combustible liquid.
May be harmful if swallowed.
May be harmful in contact with skin.
May be harmful if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.
- **Precautionary statements** Keep away from flames and hot surfaces. No smoking.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Store in a well-ventilated place. Keep container tightly closed.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture consisting of the following components.

· **Dangerous components:**

28182-81-2	Aliphatisches Polyisocyanat Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335; Acute Tox. 5, H303; Acute Tox. 5, H313	70-100%
666723-27-9	Hydrophiles, aliphatisches Polyisocyanat Acute Tox. 3, H331; Skin Sens. 1, H317; STOT SE 3, H335; Acute Tox. 5, H313; Aquatic Acute 3, H402; Aquatic Chronic 3, H412	≥2.5-<20%
822-06-0	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	≥0.1-<0.5%

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

- **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.

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- **After swallowing** *Rinse out mouth and then drink plenty of water.
In case of persistent symptoms consult doctor.*
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed** *No further relevant information available.*

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** *CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** *Not required.*
- **Environmental precautions:** *Inform respective authorities in case product reaches water or sewage system.*
- **Methods and material for containment and cleaning up:** *Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.*
- **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.*

7 Handling and storage

- **Handling**
- **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.*
- **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.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

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

822-06-0 hexamethylene diisocyanate

REL (USA)	Long-term value: 0.035 mg/m ³ , 0.005 ppm Ceiling limit: 0.14* mg/m ³ , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.005 ppm BEI
WEL (Great Britain)	Short-term value: 0.07 mg/m ³ Long-term value: 0.02 mg/m ³ Sen; as -NCO

· **DNELs**

28182-81-2 Aliphatisches Polyisocyanat

Inhalative DNEL	0.5 mg/m ³ (Workers) (long term local) 1 mg/m ³ (kei) (acute local eff)
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822-06-0 hexamethylene diisocyanate

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

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· Ingredients with biological limit values:

822-06-0 hexamethylene diisocyanate

BEI (USA)	15 µg/g creatinine Medium: urine Time: end of shift Parameter: 1.6-Hexamethylene diamine with hydrolysis (nonspecific)
BMGV (Great Britain)	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.
- **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.
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 protection:** Safety glasses
Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.

9 Physical and chemical properties

· 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

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· Flash point:	Not applicable
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive.
· Density at 20 °C	1.15 g/cm ³
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Viscosity: dynamic at 20 °C:	2000 mPas
· Other information	No further relevant information available.

10 Stability and reactivity

· Reactivity	No further relevant information available.
· Chemical stability	
· Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
· Possibility of hazardous reactions	Reacts with amines
· Conditions to avoid	No further relevant information available.
· Incompatible materials:	No further relevant information available.
· Hazardous decomposition products:	No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

· **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:**
- **Serious eye damage/irritation** No irritant effect.

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- **Respiratory or skin sensitisation**
- **Additional toxicological information:**

Sensitization possible by skin contact.

*The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Irritant*

12 Ecological information

- **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)

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

ErC50/72h 72 mg/l (Desmodesmus subspicatus)

- **Persistence and degradability** No further relevant information available.

- **Behaviour in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **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.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

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

- **Waste disposal key number:** 08 01 11 * Farb- und Lackabfälle, die organische Lösemittel oder andere gefährliche Stoffe enthalten.

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- **Uncleaned packagings:**
- **Recommendation:** *Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
Produktreste mit Wasser mischen, aushärten lassen und als Bauschutt entsorgen.*
- **Recommended cleaning agent:** *Solvent naphtha*

14 Transport information

- **UN-Number**
- **ADR, ADN, IMDG, IATA** *Void*
- **UN proper shipping name**
- **ADR, ADN, IMDG, IATA** *Void*
- **Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** *Void*
- **Packing group**
- **ADR, IMDG, IATA** *Void*
- **Environmental hazards:**
- **Marine pollutant:** *No*
- **Special precautions for user** *Not applicable.*
- **Transport in bulk according to Annex II of Marpol and the IBC Code** *Not applicable.*
- **UN "Model Regulation":** *Void*

15 Regulatory information

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

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.

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· **Department issuing data specification sheet:**

Environment protection department.

· **Contact:**

· **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

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

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 5: Acute toxicity – Category 5

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 Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3

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

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