

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

CF Hardener for Matt Clearcoat

Product no.

7-440-0500

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

Bodywork protector treatment. Only for professional use.

Coatings and Paints, Fillers, Putties, Thinners (PC9a)

Industrial uses: Uses of substances as such or in preparations at industrial sites (SU 3)

Professional uses: Public domain (administration, education, entertainment, services, craftsmen) (SU 22)

Uses advised against

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The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

August Handel GmbH
Heinrich-Hertz-Str. 3b
DE-14532 Kleinmachnow b. Berlin
Germany
Phone: +49 33203 50 300

Contact person

Matthias Scherzer

E-mail

info@augusthandel.com

SDS date

2020-12-01

SDS Version

1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Flam. Liq. 3; H226

Acute Tox. 4; H312 + H332

Skin Irrit. 2; H315

Skin Sens. 1; H317

Eye Irrit. 2; H319

STOT SE 3; H335

STOT SE 3; H336

STOT RE 2; H373

Aquatic Chronic 3; H412

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)

**Signal word**

Warning

Hazard statement(s)

Flammable liquid and vapour. (H226)
 Harmful in contact with skin or if inhaled. (H312 + H332)
 Causes skin irritation. (H315)
 May cause an allergic skin reaction. (H317)
 Causes serious eye irritation. (H319)
 May cause respiratory irritation. (H335)
 May cause drowsiness or dizziness. (H336)
 May cause damage to organs through prolonged or repeated exposure. (H373)
 Harmful to aquatic life with long lasting effects. (H412)

Precautionary statements

General If medical advice is needed, have product container or label at hand. (P101).
 Keep out of reach of children. (P102).
Prevention Use only outdoors or in a well-ventilated area. (P271).
 Wear protective gloves/protective clothing. (P280).
Response Get medical advice/attention if you feel unwell. (P314).
Storage -
Disposal Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

xylene p-xylene o-xylene m-xylene; HEXAMETHYLENE,DIISOCYANATE,HOMOPOLYMER; n-butyl acetate

Additional labelling

Contains isocyanates. May produce an allergic reaction. (EUH204)
 Repeated exposure may cause skin dryness or cracking. (EUH066)

Unique formula identifier (UFI)

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2.3. Other hazards

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional warnings

Tactile warning.

VOC (volatile organic compound)

Not applicable

SECTION 3: Composition/information on ingredients**3.1/3.2. Substances/Mixtures**

NAME:	n-butyl acetate
IDENTIFICATION NOS.:	CAS-no: 123-86-4 EC-no: 204-658-1 REACH-no: 01-2119485493-29 Index-no: 607-025-00-1
CONTENT:	25-50%
CLP CLASSIFICATION:	Flam. Liq. 3, STOT SE 3 H226, H336
NOTE:	O
NAME:	2-methoxy-1-methylethyl acetate
IDENTIFICATION NOS.:	CAS-no: 108-65-6 EC-no: 203-603-9 REACH-no: 01-2119475791-29 Index-no: 607-195-00-7
CONTENT:	10-25%
CLP CLASSIFICATION:	Flam. Liq. 3 H226
NOTE:	O L
NAME:	HEXAMETHYLENE,DIISOCYANATE,HOMOPOLYMER
IDENTIFICATION NOS.:	CAS-no: 28182-81-2 EC-no: 500-060-2 REACH-no: 01-2119485796-17
CONTENT:	25-50%
CLP CLASSIFICATION:	Acute Tox. 4, STOT SE 3, Skin Sens. 1 H317, H332, H335

NAME: xylene p-xylene o-xylene m-xylene
 IDENTIFICATION NOS.: CAS-no: 1330-20-7 EC-no: 215-535-7 REACH-no: 01-2119488216-32 Index-no: 601-022-00-9
 CONTENT: 2,5-<5%
 CLP CLASSIFICATION: Flam. Liq. 3, Acute Tox. 4, STOT RE 2, STOT SE 3, Skin Irrit. 2, Eye Irrit. 2, Asp. Tox. 1, Aquatic Chronic 3
 H226, H304, H312, H315, H319, H332, H335, H373, H412
 NOTE: O L

(* See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
 O = Organic solvent L = European occupational exposure limit.

Other information

ATEmix(inhale, vapour) = 4.4 - 6.6
 ATEmix(Dermal) = > 1000 - 1320
 Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 8 - 12
 Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 8 - 12
 N chronic (CAT 3) Sum = Sum(Ci/(M(chronic)ⁱ*25)*0.1*10[^]CATi) = 3.2 - 4.8

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the injured person into fresh air. Make sure the injured person is continuously monitored. Prevent shock by keeping the injured person warm and calm. If breathing ceases, give mouth-to-mouth resuscitation. If unconscious, roll the injured person into recovery position. Call an ambulance.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Rinse with water until the pain stops then continue to rinse for a further 30 minutes.

4.2. Most important symptoms and effects, both acute and delayed

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Call a POISON CENTER/doctor if you feel unwell.

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours from spilled material. Avoid direct contact with spilled substances. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid static electricity. Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Storage temperature

No data available.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

xylene p-xylene o-xylene m-xylene

Long-term exposure limit (8-hour TWA reference period): 50 ppm | 220 mg/m³

Short-term exposure limit (15-minute reference period): 100 ppm | 441 mg/m³

Comments: Sk BMGV (Bmgv = Biological Monitoring Guidance Value. Sk = Can be absorbed through skin.)

2-methoxy-1-methylethyl acetate

Long-term exposure limit (8-hour TWA reference period): 50 ppm | 274 mg/m³

Short-term exposure limit (15-minute reference period): 100 ppm | 548 mg/m³

Comments: Sk (Sk = Can be absorbed through skin.)

n-butyl acetate

Long-term exposure limit (8-hour TWA reference period): 150 ppm | 724 mg/m³

Short-term exposure limit (15-minute reference period): 200 ppm | 966 mg/m³

DNEL / PNEC

DNEL (n-butyl acetate): 966mg/m³

Exposure: -

Duration of Exposure: Short term

Remarks: 200ppm

DNEL (n-butyl acetate): 724mg/m³

Exposure: -

Duration of Exposure: Long term

Remarks: 150ppm

DNEL (xylen p-xylen o-xylen m-xylen): 411 mg/m³

Exposure: -

Duration of Exposure: Short term

DNEL (xylen p-xylen o-xylen m-xylen): 220 mg/m³

Exposure: -

Duration of Exposure: Long term

8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

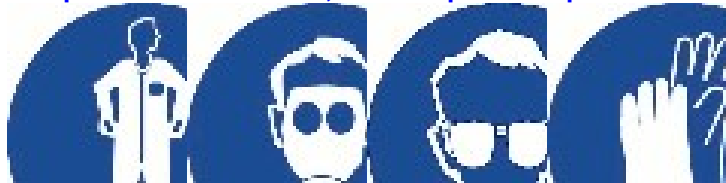
Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep containment materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment



Generally

Use only CE marked protective equipment.

Respiratory Equipment

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Butyl rubber

Material thickness: >0,7 mm.

Breakthrough time: > 480 minutes (Class 6)

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Colourless
Odour	Characteristic
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm ³)	0.976
Phase changes	
Melting point (°C)	No data available.
Boiling point (°C)	124-128
Vapour pressure (20°C)	10.7 hPa
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	27
Ignition (°C)	315
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	1.2 - 10.8
Explosive properties	No data available.
Solubility	
Solubility in water	Insoluble
n-octanol/water coefficient	No data available.
9.2. Other information	
Solubility in fat (g/L)	No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under the conditions, noted in the section "Handling and storage".

10.3. Possibility of hazardous reactions

Nothing special

10.4. Conditions to avoid

Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance: xylen p-xylen o-xylen m-xylen

Species: Rat

Test: LD50

Route of exposure: Oral

Result: >5840 mg/kg

Substance: xylen p-xylen o-xylen m-xylen

Species: Rabbit

Test: LD50

Route of exposure: Dermal

Result: >2920 mg/kg

Substance: xylen p-xylen o-xylen m-xylen

Species: Rat

Test: LC50

Route of exposure: Inhalation

Result: >2 mg/l

Substance: n-butyl acetate

Species: Rat
Test: LD50
Route of exposure: Oral
Result: 10768 mg/kg

Substance: n-butyl acetate
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: >17600 mg/kg

Substance: n-butyl acetate
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: >21,0 mg/m³

Skin corrosion/irritation

Causes skin irritation.

Data on substance: n-butyl acetate

Data on substance: 2-methoxy-1-methylethyl acetate

Serious eye damage/irritation

Causes serious eye irritation.

Data on substance: 2-methoxy-1-methylethyl acetate

Data on substance: n-butyl acetate
Result: Irritating to the eyes

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available.

Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: xylen p-xylen o-xylen m-xylen
Species: Daphnia
Test: EC50
Duration: 48 h
Result: 7,4 mg/l

Substance: xylen p-xylen o-xylen m-xylen
Species: Fish
Test: LC50
Duration: 96 h
Result: 13,5 mg/l

Substance: n-butyl acetate
 Species: Daphnia
 Test: EC50
 Duration: 48 h
 Result: 44 mg/L

Substance: n-butyl acetate
 Species: Algae
 Test: EC50
 Duration: 96 h
 Result: 320 mg/L

Substance: n-butyl acetate
 Species: Daphnia
 Test: LC50
 Duration: 24 h
 Result: 205 mg/L

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data available.			

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
No data available.			

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code	Description
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

Specific labelling

Not applicable

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

14.1. UN number	1263
14.2. UN proper shipping name	PAINT RELATED MATERIAL
14.3. Transport hazard class(es)	3
14.4. Packing group	III
Notes	-
Tunnel restriction code	D/E

IMDG

UN-no.	1263
Proper Shipping Name	PAINT RELATED MATERIAL
Class	3
PG*	III
EmS	F-E, S-E
MP**	No
Hazardous constituent	flammable liquids

IATA/ICAO

UN-no.	1263
Proper Shipping Name	PAINT RELATED MATERIAL
Class	3
PG*	III

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Restrictions for application**

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

Additional information

Not applicable

Seveso

Seveso III Part 1: P5c

Biocidal reg. no.

Not applicable

Sources

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).

Regulation (EC) 1907/2006 (REACH).

The Control of Major Accident Hazards (COMAH) Regulations 2015.

15.2. Chemical safety assessment

No

SECTION 16: Other information**Full text of H-phrases as mentioned in section 3**

H226 - Flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

H373 - May cause damage to organs through prolonged or repeated exposure^a.

H412 - Harmful to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

PC9a = Coatings and Paints, Fillers, Putties, Thinners

SU 3 = Industrial uses: Uses of substances as such or in preparations at industrial sites

SU 22 = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data.

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

SG

**Date of last essential change
(First cipher in SDS version)**

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**Date of last minor change
(Last cipher in SDS version)**

-