

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

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

1.1 Product identifier

Trade name : TOP CLEAN-Härter / Hardener 405-3C

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

Use of the Substance/Mixture : Industrial serial painting

1.3 Details of the supplier of the safety data sheet

Producer : Mankiewicz Gebr. & Co. (GmbH & Co. KG)
Georg-Wilhelm-Strasse 189
21107 Hamburg
Germany

Telephone : +49 (0) 40 75103 0
Telefax : +49 (0) 40 75103 375
E-mail address : sdb_info@umco.de

1.4 Emergency telephone number

Emergency telephone number : +49 (0) 551 / 19240 (Toxic agent information centre North /
NORD)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.
Acute toxicity, Category 4 H332: Harmful if inhaled.
Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Respiratory system H335: May cause respiratory irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

Signal word	:	Warning
Hazard statements	:	H226 Flammable liquid and vapour. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H335 May cause respiratory irritation.
Precautionary statements	:	Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

28182-81-2	Hexamethylene diisocyanate, oligomers
191427-71-1	Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, polyethylene glycol mono-Me ether-blocked
1330-20-7	xylene
822-06-0	hexamethylene-di-isocyanate

Additional Labelling:

Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Hardener based on polyisocyanates

Hazardous components

Chemical name CAS-No. EC-No. Registration number Remarks	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
--	---	-------------------

Mankiewicz Gebr. & Co. (GmbH & Co. KG)
Georg-Wilhelm-Straße 169
21107 Hamburg (Wilhelmsburg)
Tel.: +49 (0) 40 / 75 10 30
Fax: +49 (0) 40 / 75 10 33 75
www.mankiewicz.de

Bank Name	Ort	Kto.-Nr.	BLZ	BIC	IBAN
Deutsche Bank	Hamburg	600227300	200 700 00	DEUTDE33XXX	DE58 2007 0000 0600 2273 00
HypoVereinsbank	Hamburg	59273300	200 300 00	HYVDE3300	DE34 2003 0000 0059 2733 00
Postbank	Hamburg	373205	200 100 20	PBNKDEFF200	DE85 2001 0020 0000 3732 05

Sitz/Registriergericht Hamburg: HRA 42442
Persönlich haftende Gesellschafterin:
Grau Gebr. Beteiligungs-GmbH
Sitz/Registriergericht Hamburg: HRB 17189
Geschäftsführender Gesellschafter:
Michael O. Grau

Bureau Veritas
Certification:
ISO 9001,
TS 16949,
EN 9100



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

Hexamethylene diisocyanate, oligomers 28182-81-2 01-2119488934-20	Acute Tox. 4; H332 Skin Sens. 1; H317 STOT SE 3; H335	>= 40 - <= 100
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, polyethylene glycol mono-Me ether-blocked 191427-71-1	Skin Sens. 1B; H317 STOT SE 3; H335	>= 5 - < 12,5
xylene 1330-20-7 215-535-7 01-2119488216-32 Note C	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Asp. Tox. 1; H304 STOT RE 2; H373	>= 1 - < 5
hexamethylene-di-isocyanate 822-06-0 212-485-8 01-2119457571-37	Acute Tox. 3; H331 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335	>= 0,1 - < 0,25
Substances with a workplace exposure limit :		
2-methoxy-1-methylethyl acetate 108-65-6 203-603-9 01-2119475791-29	Flam. Liq. 3; H226	>= 1 - < 5

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : In all cases of doubt, or when sickness symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.
- If inhaled : Remove to fresh air, keep patient warm and at rest.
Irregular breathing/no breathing: artificial respiration.
If unconscious place in recovery position and seek medical advice.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash skin thoroughly with soap and water or use recognised skin cleanser.
Do NOT use solvents or thinners !
- In case of eye contact : Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.
- If swallowed : Do NOT induce vomiting.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

If accidentally swallowed obtain immediate medical attention.
Never give anything by mouth to an unconscious person.
Keep at rest.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol resistant foam, CO2, powders, water spray

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters

Special protective equipment for firefighters : Appropriate breathing apparatus may be required.

Further information : Cool endangered containers with water in case of fire.
DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES!!

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Exclude sources of ignition and ventilate the area.
Do not inhale vapours.
Refer to protective measures listed in sections 7 and 8.
Immediately clean contaminated areas with following substances:

Water	45 Vol.%
Ethanol or Isopropyl Alcohol	50 Vol.%
Ammonia solution (density=0,88)	5 Vol.%

Alternative applicable to that (not flammable):

Sodium Carbonate	5 Vol.%
Water	95 Vol.%

6.2 Environmental precautions

Environmental precautions : Do not let product enter drains.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

MANKIEWICZ
Lackierideen der Zukunft



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018

Print Date 26.07.2018

Version 2

If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Add the same decontaminant to the remnants and let stand for several days until no further reaction in non-sealed container. Once this stage is reached, close container and dispose according to local regulations.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see chapter 13).
Clean preferably with a detergent; avoid use of solvents.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used !
Comply with the health and safety at work laws.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : No special protective measures against fire required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions : Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep container dry in a cool, well-ventilated place. Precautions should be taken to minimise exposure to atmospheric humidity or water: CO₂ will be formed which in closed containers can result in pressurisation. **DO NOT KEEP THE CONTAINERS SEALED !!**

Advice on common storage : Keep away from oxidizing agents and strongly acid or alkaline materials.

Storage temperature : 5 - 35 °C

7.3 Specific end use(s)

Specific use(s) : This information is not available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

CAS-No.	Source	Value	Ceiling Limit Value	Update
2-methoxy-1-methylethyl acetate				
108-65-6	2000/39/EC	50 ml/m3 275 mg/m3		08.06.2000
Further information:	Skin			
2-methoxy-1-methylethyl acetate				
108-65-6	List of approved workplace exposure limits (WELs) / EH40	50 ml/m3 274 mg/m3		01.09.2003
Further information:	Sk			
xylene				
1330-20-7	2000/39/EC	50 ml/m3 221 mg/m3		08.06.2000
Further information:	Skin			
xylene				
1330-20-7	Maximum Exposure Limits (MELs) / EH40	50 ml/m3 220 mg/m3		16.02.2016
Further information:	Sk			
hexamethylene-di-isocyanate				
822-06-0	List of approved workplace exposure limits (WELs) / EH40	0,02 mg/m3		December 2011
Further information:	Sen			

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

xylene : End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 221 mg/m3
End Use: Workers
Exposure routes: Dermal
Potential health effects: Long-term systemic effects
Value: 212 mg/kg bw/day
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 65,3 mg/m3
End Use: Consumers
Exposure routes: Dermal
Potential health effects: Long-term systemic effects
Value: 125 mg/kg bw/day
End Use: Consumers
Exposure routes: Oral
Potential health effects: Long-term systemic effects
Value: 12,5 mg/kg bw/day



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

MANKIEWICZ
Lackierideen der Zukunft



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018

Print Date 26.07.2018

Version 2

2-methoxy-1-methylethyl acetate : End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 275 mg/m³
End Use: Workers
Exposure routes: Dermal
Potential health effects: Long-term systemic effects
Value: 796 mg/kg bw/day
End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 33 mg/m³
End Use: Consumers
Exposure routes: Dermal
Potential health effects: Long-term systemic effects
Value: 320 mg/kg bw/day
End Use: Consumers
Exposure routes: Oral
Potential health effects: Long-term systemic effects
Value: 36 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

xylene : Fresh water
Value: 0,327 mg/l
Marine water
Value: 0,327 mg/l
Fresh water sediment
Value: 12,46 mg/kg dry weight (d.w.)
Marine sediment
Value: 12,46 mg/kg dry weight (d.w.)
Sewage treatment plant
Value: 6,58 mg/l
Soil
Value: 2,31 mg/kg dry weight (d.w.)

hexamethylene-di-isocyanate : Sewage treatment plant
Value: 8,42 mg/l

2-methoxy-1-methylethyl acetate : Fresh water
Value: 0,635 mg/l
Marine water
Value: 0,064 mg/l
Fresh water sediment
Value: 3,29 mg/kg dry weight (d.w.)
Marine sediment
Value: 0,329 mg/kg dry weight (d.w.)
Sewage treatment plant
Value: 100 mg/l
Soil
Value: 0,29 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and below the OEL (= Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Eye protection : Wear safety goggles to protect against splashes.

Hand protection

Mankiewicz Gebr. & Co. (GmbH & Co. KG)
Georg-Wilhelm-Strasse 169
21107 Hamburg (Wilhelmsburg)
Tel.: +49 (0) 40 / 75 10 30
Fax: +49 (0) 40 / 75 10 33 75
www.mankiewicz.de

Bank Name	Ort	Kto.-Nr.	BLZ	BIC	IBAN
Deutsche Bank	Hamburg	600227300	200 700 00	DEUTDE33HAN	DE58 2007 0000 0600 2273 00
HypoVereinsbank	Hamburg	59273300	200 300 00	HYVDE33HAN	DE34 2003 0000 0059 2733 00
Postbank	Hamburg	373205	200 100 20	PBNKDE33HAN	DE85 2001 0020 0000 3732 05

Sitz/Registriergericht Hamburg: HRA 42442
Persönlich haftende Gesellschafterin:
Grau Gebr. Beteiligungs-GmbH
Sitz/Registriergericht Hamburg: HRB 17189
Geschäftsführender Gesellschafter:
Michael O. Grau

Bureau Veritas
Certification:
ISO 9001,
TS 16949,
EN 9100



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

- Remarks : Adhere to the professional organisation rule "Use of protective gloves". Appropriate chemicals resistant glove tested in compliance with EN 374.
Recommendation for protection against components generally found in the products:

For short-term contact (i.e. splash protection):
Appropriate material:
nitrile rubber, Neoprene
Material thickness: > 0,4 mm
Breakthrough time: > 480 min

Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Preventive hand protection (skin protection cream) recommended. Wash immediately contaminated skin. Design operations thus to avoid permanent use of protective gloves.
- Skin and body protection : Personal should wear antistatic clothings made of natural fiber or offhigh temperature resistant synthetic fiber. All parts of the body shouldbe washed after contact.
- Respiratory protection : By spraying: air-fed respirator.
By other operations than spraying: in well ventilated areas, air-fed respirators could be replaced by a combination of charcoal filter andparticulate filter maskUse half-mask model with cartridge or air-fed.
- Protective measures : Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.Do not eat or drink during work - no smoking.Avoid product contact with skin, eyes and clothing.Avoid the inhalation of dust from sanding, particulates and spray mist arising from the application of this preparation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid
Colour : according product name
Odour : characteristic
Flash point : 41 °C
Method: ISO 13736
- Upper explosion limit : No data available
- Lower explosion limit : No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

Vapour pressure : ca. 100 hPa (50 °C)

Density : ca. 1,10 g/cm³ (20 °C)

Water solubility : insoluble

Auto-ignition temperature : > 200 °C

Viscosity
Flow time : 44 s
Cross section: 4 mm
Method: DIN 53211

30 s
Cross section: 6 mm
Method: ISO 2431

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Stable under recommended storage and handling conditions (See section 7).

10.5 Incompatible materials

Materials to avoid : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result distortion blowing and in extreme cases bursting of the container.

10.6 Hazardous decomposition products

Hazardous decomposition products : In a fire, hazardous decomposition products, such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomers of isocyanates, amines and alcohols may be produced.

Mankiewicz Gebr. & Co. (GmbH & Co. KG)
Georg-Wilhelm-Straße 169
21107 Hamburg (Wilhelmsburg)
Tel.: +49 (0) 40 / 75 10 30
Fax: +49 (0) 40 / 75 10 33 75
www.mankiewicz.de

Bank Name	Ort	Kto.-Nr.	BLZ	BIC	IBAN
Deutsche Bank	Hamburg	600227300	200 700 00	DEUTDE33HAN	DE58 2007 0000 0600 2273 00
HypoVereinsbank	Hamburg	59273300	200 300 00	HYVEDE33HAN	DE34 2003 0000 0059 2733 00
Postbank	Hamburg	373205	200 100 20	PBNKDE33HAN	DE85 2001 0020 0000 3732 05

Sitz/Registriergericht Hamburg: HRA 42442
Persönlich haftende Gesellschafterin:
Grau Gebr. Beteiligungs-GmbH
Sitz/Registriergericht Hamburg: HRB 17189
Geschäftsführender Gesellschafter:
Michael O. Grau

Bureau Veritas
Certification:
ISO 9001,
TS 16949,
EN 9100



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute inhalation toxicity : Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Acute toxicity estimate : 15,61 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 2.000 mg/kg
Method: Calculation method

Components:

Hexamethylene diisocyanate, oligomers, Hexamethylene diisocyanate, oligomers :

Acute inhalation toxicity : Assessment: The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

xylene, xylene :

Acute oral toxicity : LD50 (Rat): 4.300 mg/kg

Components:

Hexamethylene diisocyanate, oligomers, Hexamethylene diisocyanate, oligomers:

Species: Mouse

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 406

Components:

Hexamethylene diisocyanate, oligomers, Hexamethylene diisocyanate, oligomers :

Assessment: May cause respiratory irritation.

Further information

Product:

Remarks: Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin., The liquid splashed in the eyes may cause irritation and reversible damage., Based on the properties of the isocyanate components and considering toxicological data on similar preparations: This preparation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment
Short-term (acute) aquatic hazard

: There are no data available on the preparation itself.

12.2 Persistence and degradability

Product:

Biodegradability

: Remarks: There are no data available on the preparation itself.

12.3 Bioaccumulative potential

Product:

Bioaccumulation

: Remarks: There are no data available on the preparation itself.

12.4 Mobility in soil

Product:

Mobility

: Remarks: There are no data available on the preparation itself.

12.5 Results of PBT and vPvB assessment

Product:

Assessment

: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information

: There are no data available on the preparation itself.

The product should not be allowed to enter drains or water courses.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

: The listed waste code numbers, according to the European Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

Contaminated packaging

: Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

Waste key for the unused product

: 080111 waste paint and varnish containing organic solvents or other dangerous substances



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

MANKIEWICZ
Lackierideen der Zukunft



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018

Print Date 26.07.2018

Version 2

SECTION 14: Transport information

14.1 UN number

ADR : UN 1263

IMDG : UN 1263

IATA : UN 1263

14.2 UN proper shipping name

ADR : PAINT RELATED MATERIAL

IMDG : PAINT RELATED MATERIAL

IATA : PAINT RELATED MATERIAL

14.3 Transport hazard class(es)

ADR : 3

IMDG : 3

IATA : 3

14.4 Packing group

ADR

Packing group : III

Classification Code : F1

Hazard Identification Number : 30

Labels : 3

Tunnel restriction code : (D/E)

IMDG

Packing group : III

Labels : 3

EmS Code : F-E, S-E

IATA

Packing instruction (cargo aircraft) : 366

Packing instruction (passenger aircraft) : 355

Packing group : III

Labels : Flammable Liquids

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

Remarks : If transported within the user's premises: To be transported always in closed, upright and safe containers. Make sure that persons handling

Mankiewicz Gebr. & Co. (GmbH & Co. KG)
Georg-Wilhelm-Straße 169
21107 Hamburg (Wilhelmsburg)
Tel.: +49 (0) 40 / 75 10 30
Fax: +49 (0) 40 / 75 10 33 75
www.mankiewicz.de

Bank Name
Deutsche Bank
HypoVereinsbank
Postbank

Ort
Hamburg
Hamburg
Hamburg

Kto.-Nr.
600227300
59273300
373205

BLZ
200 700 00
200 300 00
200 100 20

BIC
DEUTDE33XXX
HYVDE33300
PBNKDE3300

IBAN
DE58 2007 0000 0600 2273 00
DE34 2003 0000 0059 2733 00
DE85 2001 0020 0000 3732 05

Sitz/Registriergericht Hamburg: HRA 42442
Persönlich haftende Gesellschafterin:
Grau Gebr. Beteiligungs-GmbH
Sitz/Registriergericht Hamburg: HRB 17189
Geschäftsführender Gesellschafter:
Michael O. Grau

Bureau Veritas
Certification:
ISO 9001,
TS 16949,
EN 9100



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018
Print Date 26.07.2018
Version 2

these containers are aware of the rules of conduct in case of incident or spillage.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern : Not applicable for Authorisation (Article 59).

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) : VOC content excluding water 20 %
221 g/l

Other regulations : The information given in this material safety data sheet does not release the user from its duty of risk assessment and control in the work place defined in other health and safety law. Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the mixture.

SECTION 16: Other information

Full text of H-Statements

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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
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.

Further information

Note C Some organic substances may be marketed either in a specific isomeric form or

Mankiewicz Gebr. & Co. (GmbH & Co. KG)
Georg-Wilhelm-Straße 169
21107 Hamburg (Wilhelmsburg)
Tel.: +49 (0) 40 / 75 10 30
Fax: +49 (0) 40 / 75 10 33 75
www.mankiewicz.de

Bank Name	Ort	Kto.-Nr.	BLZ	BIC	IBAN
Deutsche Bank	Hamburg	600227300	200 700 00	DEUTDE33HAN	DE58 2007 0000 0600 2273 00
HypoVereinsbank	Hamburg	59273300	200 300 00	HYVEDE33HAN	DE34 2003 0000 0059 2733 00
Postbank	Hamburg	373205	200 100 20	PBNKDE33HAN	DE85 2001 0020 0000 3732 05

Sitz/Registriergericht Hamburg: HRA 42442
Persönlich haftende Gesellschafterin:
Grau Gebr. Beteiligungs-GmbH
Sitz/Registriergericht Hamburg: HRB 17189
Geschäftsführender Gesellschafter:
Michael O. Grau

Bureau Veritas
Certification:
ISO 9001,
TS 16949,
EN 9100



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

MANKIEWICZ
Lackierideen der Zukunft



Commercial Product Name: TOP CLEAN-Härter / Hardener 405-3C
Quality No.: 4053C00000000

Revision Date 26.07.2018

Print Date 26.07.2018

Version 2

as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Further information

Other information : This safety datasheet complies with the requirements of regulation (EC) No 1907/2006(2015/830).

Department issuing safety data sheet

UMCO GmbH
Georg-Wilhelm-Str.187, D-21107 Hamburg
Telefon: +49(0)40/555 546 300 Fax: +49(0)40/555 546 357
e-mail:umco@umco.de

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.