

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
Print date : 02.12.2020

Version (Revision) : 5.1.1 (5.1.0)

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

1.1 Product identifier

Marking ink 770 P
blue (15050200003040)
Unique Formula Identifier (UFI): Q83N-YQEH-1YFY-1889

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

Relevant identified uses

Industrial marking ink

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

Stefan Kupietz GmbH & Co. KG
Chemische Fabrik

Street : August-Wilhelm-Kühnholz-Str. 9

Postal code/city : 26135 Oldenburg

Telephone : +49(0)441/20 69 50

Telefax : +49(0)441 /20 69 520

Information contact : E-Mail: info@kupietz.de

1.4 Emergency telephone number

Poison emergency centre +49-551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.
Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.
STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Flame (GHS02) · Exclamation mark (GHS07)

Signal word

Warning

Hazard components for labelling

4-HYDROXY-4-METHYLPENTAN-2-ONE ; CAS No. : 123-42-2

Hazard statements

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
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Revision date : 02.12.2020
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P312 Call a POISON CENTER/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

4-HYDROXY-4-METHYLPENTAN-2-ONE ; REACH Registration No. : 01-2119473975-21-xxxx ; EC No. : 204-626-7; CAS No. : 123-42-2

Weight fraction : < 45 %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Eye Irrit. 2 ; H319 STOT SE 3 ; H335
Specific Conc. Limits : Eye Irrit. 2 ; H319: C ≥ 10 %

1-METHOXY-2-PROPANOL ; REACH Registration No. : 01-2119457435-35-xxxx ; EC No. : 203-539-1; CAS No. : 107-98-2

Weight fraction : < 10 %
Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 STOT SE 3 ; H336

ETHANOL ; REACH Registration No. : 01-2119457610-43-xxxx ; EC No. : 200-578-6; CAS No. : 64-17-5

Weight fraction : < 5 %
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319

PROPAN-2-OL ; REACH Registration No. : 01-2119457558-25-xxxx ; EC No. : 200-661-7; CAS No. : 67-63-0

Weight fraction : < 3 %
Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319 STOT SE 3 ; H336

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Immediately remove all contaminated clothing.

Following inhalation

Provide fresh air.

In case of skin contact

Wash away with soap and water and rinse.

After eye contact

Flush with plenty of water (10 - 15 min.). Call a physician.

After ingestion

Drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Safety Data Sheet

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Trade name : Marking ink 770 P
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Suitable extinguishing media

alcohol resistant foam , Carbon dioxide (CO2) , Extinguishing powder or Water spray jet .

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

None

5.4 Additional information

Cool endangered containers with water in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources on account of the organic solvent content and air room well. Do not inhale vapours.

6.2 Environmental precautions

Take up with a liquid absorbing material and proceed according to the waste disposal regulations. Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

For cleaning up

Remove mechanically, take-up residues with absorbing material.

6.4 Reference to other sections

None

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Normal precautions taken when handling chemicals should be observed. Only use in locations with adequate suction ventilation.

Protective measures

Measures to prevent fire

Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Do not leave vessels open, earth storage containers.

Hints on joint storage

Store the foodstuffs separately. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.

Storage class (TRGS 510) : 3

Further information on storage conditions

Store containers tightly closed in a cool well ventilated place.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

4-HYDROXY-4-METHYLPENTAN-2-ONE ; CAS No. : 123-42-2

Limit value type (country of origin) : TRGS 900 (D)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
Print date : 02.12.2020

Version (Revision) : 5.1.1 (5.1.0)

Limit value : 20 ppm / 96 mg/m³
Peak limitation : 2(I)
Remark : H
Version : 29.03.2019

1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 100 ppm / 370 mg/m³
Peak limitation : 2(I)
Remark : Y
Version : 29.03.2019

Limit value type (country of origin) : STEL (EC)
Limit value : 150 ppm / 568 mg/m³
Remark : Skin
Version : 20.06.2019

Limit value type (country of origin) : TWA (EC)
Limit value : 100 ppm / 375 mg/m³
Remark : Skin
Version : 20.06.2019

2-(2-ETHOXYETHOXY)ETHANOL ; CAS No. : 111-90-0
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 6 ppm / 35 mg/m³
Peak limitation : 2(I)
Remark : Y
Version : 29.03.2019

ETHANOL ; CAS No. : 64-17-5
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 200 ppm / 380 mg/m³
Peak limitation : 4(II)
Remark : Y
Version : 29.03.2019

PROPAN-2-OL ; CAS No. : 67-63-0
Limit value type (country of origin) : TRGS 900 (D)
Limit value : 200 ppm / 500 mg/m³
Peak limitation : 2(II)
Remark : Y
Version : 29.03.2019

Biological limit values

1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2
Limit value type (country of origin) : TRGS 903 (D)
Parameter : 1-methoxy-2-propanol / Urine (U) / End of exposure or end of shift
Limit value : 15 mg/l
Version : 29.03.2019

PROPAN-2-OL ; CAS No. : 67-63-0
Limit value type (country of origin) : TRGS 903 (D)
Parameter : Acetone / Whole blood (B) / End of exposure or end of shift
Limit value : 25 mg/l
Version : 29.03.2019

Limit value type (country of origin) : TRGS 903 (D)
Parameter : Acetone / Urine (U) / End of exposure or end of shift
Limit value : 25 mg/l
Version : 29.03.2019

8.2 Exposure controls

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
Print date : 02.12.2020

Version (Revision) : 5.1.1 (5.1.0)

Personal protection equipment

Eye/face protection

Use tightly fitting safety glasses.

Skin protection

Hand protection

Use protective butyl rubber gloves (0,5 mm). Permeation time of glove material: level \geq 240 min (4h) EN374

Respiratory protection

Suitable respiratory protection apparatus

Respiratory protection necessary at: aerosol or mist formation. Half-face mask (DIN EN 140) Filtering device (full mask or mouthpiece) with filter: A

General information

The usual precautionary measures for the handling of chemicals have to be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid
Colour : blue
Odour : characteristic

Safety characteristics

Physical state :		Liquid	
Freezing point :		No data available	
Initial boiling point and boiling range :	(1013 hPa) ~	112 °C	
Decomposition temperature :	>	200 °C	
Flash point :	~	36 °C	Brookfield
Auto-ignition temperature :		No data available	
Lower explosion limit :		No data available	
Upper explosion limit :		No data available	
Vapour pressure :	(50 °C) <	1100 hPa	
Density :	(20 °C) ~	1,164 g/cm ³	
Solvent separation test :	(20 °C) <	3 %	
Water solubility :	(20 °C)	No data available	
pH :	~	5,2	
log P O/W :		No data available	
Flow time :	(20 °C) ~	35 s	DIN-cup 4 mm
Odour threshold :		No data available	
Relative vapour density :	(20 °C)	No data available	
Vapourisation rate :		No data available	
Flammable aerosols :		No data available.	
Oxidising liquids :		No data available.	
Explosive properties :		No data available.	

9.2 Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
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Version (Revision) : 5.1.1 (5.1.0)

10.1 Reactivity

No information available.

10.2 Chemical stability

No information available.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

None, if handled according to order.

10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. In connection with inorganic and organic acids, acid chlorides violent reactions can take place and CO₂ released. Formation of hydrogen by acids, lyes, moisture possible.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Parameter :	LD50 (4-HYDROXY-4-METHYLPENTAN-2-ONE ; CAS No. : 123-42-2)
Exposure route :	Oral
Species :	Rat
Effective dose :	4 g/kg
Parameter :	LD50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Exposure route :	Oral
Species :	Rat
Effective dose :	5660 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	7600 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Oral
Species :	Rabbit
Effective dose :	6300 mg/kg
Parameter :	LD50 (PROPAN-2-OL ; CAS No. : 67-63-0)
Exposure route :	Oral
Species :	Rat
Effective dose :	5840 mg/kg

Acute dermal toxicity

Parameter :	LD50 (4-HYDROXY-4-METHYLPENTAN-2-ONE ; CAS No. : 123-42-2)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	13,5 g/kg
Parameter :	LD50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	9999,99 mg/kg
Parameter :	LD50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route :	Dermal

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
Print date : 02.12.2020

Version (Revision) : 5.1.1 (5.1.0)

Species : Rabbit
Effective dose : 20000 mg/kg

Acute inhalation toxicity

Parameter : LC50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Exposure route : Inhalation
Species : Rat
Effective dose : 27,596 mg/l
Exposure time : 6 h

Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Inhalation
Species : Rat
Effective dose : 124,7 mg/l
Exposure time : 4 h

Practical experience/human evidence

Slight narcotic effect. Prolonged inhalation of vapours in high concentrations may lead to headache, giddiness and nausea.

Corrosion

Skin corrosion/irritation

Parameter : Skin corrosion/irritation (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Rabbit
Result : Not an irritant
Parameter : Skin corrosion/irritation (ETHANOL ; CAS No. : 64-17-5)
Result : Not an irritant

Serious eye damage/eye irritation

Parameter : Serious eye damage/eye irritation (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Rabbit
Result : Very minor single cell staining (0,5)
Parameter : Serious eye damage/eye irritation (ETHANOL ; CAS No. : 64-17-5)
Result : Strongly irritant

Respiratory or skin sensitisation

Skin sensitisation

Parameter : Skin sensitisation (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Guinea pig
Result : Not sensitising.
Parameter : Skin sensitisation (ETHANOL ; CAS No. : 64-17-5)
Result : Not sensitising.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

Parameter : Carcinogenicity (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Exposure route : Carcinogenicity
Result : Negative.
Parameter : Carcinogenicity (ETHANOL ; CAS No. : 64-17-5)
Exposure route : Carcinogenicity
Result : Negative.

Germ cell mutagenicity

In vitro mutagenicity

Parameter : In vitro mutagenicity (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Exposure route : In vitro mutagenicity
Result : Negative.
Parameter : In vitro mutagenicity (ETHANOL ; CAS No. : 64-17-5)
Exposure route : In vitro mutagenicity
Result : Negative.

Genotoxicity

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
Print date : 02.12.2020

Version (Revision) : 5.1.1 (5.1.0)

Parameter : Genotoxicity (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Exposure route : Genotoxicity
Result : Negative.

Reproductive toxicity

Adverse effects on developmental toxicity

Parameter : One generation reproduction toxicity test (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Exposure route : One generation reproduction toxicity test
Result : Negative.
Parameter : One generation reproduction toxicity test (ETHANOL ; CAS No. : 64-17-5)
Exposure route : One generation reproduction toxicity test
Result : Negative.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Leuciscus idus (golden orfe)
Effective dose : 6812 mg/l
Exposure time : 96 h
Evaluation : Harmless to fish up to the concentration tested.
Parameter : LC50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Pimephales promelas (fathead minnow)
Effective dose : 20800 mg/l
Exposure time : 96 h
Evaluation : Harmless to fish up to the concentration tested.
Parameter : LC50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Oncorhynchus mykiss (Rainbow trout)
Effective dose : => 1000 mg/l
Exposure time : 96 h
Evaluation : Harmless to fish up to the concentration tested.
Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Acute (short-term) fish toxicity
Effective dose : 11000 mg/l
Exposure time : 96 h

Acute (short-term) toxicity to crustacea

Parameter : EC50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Daphnia magna (Big water flea)
Effective dose : 23300 mg/l
Exposure time : 48 h
Evaluation : Harmless to daphnia up to the tested concentration.
Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Daphnia magna (Big water flea)
Effective dose : 9950 mg/l
Exposure time : 48 h
Parameter : LC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Daphnia magna (Big water flea)
Effective dose : 9280 mg/l
Exposure time : 48 h

Acute (short-term) toxicity to aquatic algae and cyanobacteria

Parameter : ErC50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
Print date : 02.12.2020

Version (Revision) : 5.1.1 (5.1.0)

Species : Pseudokirchneriella subcapitata
Effective dose : > 1000 mg/l
Exposure time : 7 day(s)
Evaluation : Harmless to algae up to the concentration tested.
Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Chlorella vulgaris
Effective dose : 275 mg/l
Exposure time : 3 h
Evaluation : Harmless to algae up to the concentration tested.
Method : OECD 201

Chronic (long-term) algae toxicity

Parameter : EC10 (ETHANOL ; CAS No. : 64-17-5)
Species : Chlorella vulgaris
Effective dose : 11,5 mg/l
Exposure time : 3 h
Evaluation : Chronic (long-term) algae toxicity
Method : OECD 201

Toxicity to microorganisms

Parameter : EC50 (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Species : Bacteria toxicity
Effective dose : 1000 mg/l
Exposure time : 3 h
Evaluation : Bacteria toxicity
Parameter : EC50 (ETHANOL ; CAS No. : 64-17-5)
Species : Bacteria toxicity
Effective dose : 5800 mg/l
Exposure time : 4 h

12.2 Persistence and degradability

In case of appropriate conduction into adapted biological purification plants no disturbances have to be expected.

Biodegradation

Parameter : Biodegradation (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Inoculum : Degree of elimination
Degradation rate : 96 %
Evaluation : Readily biodegradable (according to OECD criteria).
Method : OECD 301E
Parameter : Biodegradation (ETHANOL ; CAS No. : 64-17-5)
Inoculum : Degree of elimination
Degradation rate : 84 %
Test duration : 20 h
Evaluation : Readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

Parameter : Bioconcentration factor (BCF) (1-METHOXY-2-PROPANOL ; CAS No. : 107-98-2)
Bioconcentration factor (BCF)
Value : < 100
No indication of bioaccumulation potential.

12.4 Mobility in soil

Very high mobility in soil with a negligible tendency to leave the sediment.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
Print date : 02.12.2020

Version (Revision) : 5.1.1 (5.1.0)

Do not empty into waters or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose according to legislation.

Directive 2008/98/EC (Waste Framework Directive)

After intended use

Waste codes/waste designations according to EWC/AVV

- 080111

Additional information

Contaminated packaging should be residue-free emptying. They can then be recycled after appropriate cleaning (Waste code 080112 contains no organic solvents). Contaminated packaging should be disposed of like the product. (Waste code 150110)

SECTION 14: Transport information

14.1 UN number

UN 1263

14.2 UN proper shipping name

Land transport (ADR/RID)

PAINT RELATED MATERIAL

Sea transport (IMDG)

PAINT RELATED MATERIAL

Air transport (ICAO-TI / IATA-DGR)

PAINT RELATED MATERIAL

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) : 3
Classification code : F1
Hazard identification number (Kemler No.) : 30
Tunnel restriction code : D/E
Special provisions : LQ 51 · E 1
Hazard label(s) : 3

Sea transport (IMDG)

Class(es) : 3
EmS-No. : F-E / S-E
Special provisions : LQ 51 · E 1
Hazard label(s) : 3

Air transport (ICAO-TI / IATA-DGR)

Class(es) : 3
Special provisions : E 1
Hazard label(s) : 3

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : No

Sea transport (IMDG) : No

Air transport (ICAO-TI / IATA-DGR) : No

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Marking ink 770 P
blue
Revision date : 02.12.2020
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Version (Revision) : 5.1.1 (5.1.0)

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3, 40

National regulations

Water hazard class (WGK)

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

15.2 Chemical safety assessment

No information available.

SECTION 16: Other information

16.1 Indication of changes

03. Hazardous ingredients

16.2 Abbreviations and acronyms

None

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

See SECTION 2.1 (classification).

16.5 Relevant H- and EUH-phrases (Number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.