FK9931M-200

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

*
1.1. Product identifier
Trade name/designation:

FK9931M-200

Other means of identification:
AgPd thick film paste for AlN FK9931M-200

Article No.:
10093

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture:
thick film ink

Relevant identified uses:

Life cycle stage [LCS]
IS: Use at industrial sites
Sector of uses [SU]
SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites
Product Categories [PC]
PC 9a: Coatings and paints, thinners, paint removers
Process categories [PROC]
PROC 10: Roller application or brushing
Environmental release categories [ERC]
ERC 5: Use at industrial site leading to inclusion into/onto article
Article categories [AC]
AC 0: Other

1.3. Details of the supplier of the safety data sheet
Supplier (manufacturer/importer/only representative/downstream user/distributor):

Fraunhofer IKTS-DD, TFC, RS
Dickschichttechnik und funktioneller Druck | Thick-Film Technology and Functional Printing
Winterbergstraße 28
01277 Dresden
Germany
Telephone: +49-351-2553-7916
Telefax: +49-351-2554-236
E-mail: service@ikts-tfc.de
Website: www.ikts.fraunhofer.de

E-mail (competent person): service@ikts-tfc.de

1.4. Emergency telephone number
Richard Schmidt, +49-351-2553-7916/-7900 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Hazardous to the aquatic environment *(Aquatic Acute 1)*	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	Calculation method.

*
2.2. Label elements

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

Hazard pictograms:

GHS09
Environment

Signal word: Warning

Hazard statements for environmental hazards	
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Supplemental hazard information: —

Precautionary statements Prevention	
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing and eye/face protection.

Precautionary statements Response	
P391	Collect spillage.

Precautionary statements Disposal	
P501	Dispose of contents/container to Dispose of waste according to applicable legislation..

Special rules for supplemental label elements for certain mixtures:
27,8 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (oral).
77,3 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (dermal).
100,0 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (inhalative).
53,0 % percent of the mixture consists of components of unknown hazards to the aquatic environment.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description:
Precious metals, glass and inorganic additives embedded in an organic vehicle.

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 7440-22-4 **EC No.:** 231-131-3	**silver** Substance with a community workplace exposure limit.	10 – ≤ 25 weight-%

SECTION 4: First aid measures

*
4.1. Description of first aid measures

General information:
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:
Provide fresh air.

After eye contact:
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

Following ingestion:
Rinse mouth. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
No data available

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

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Water spray jet, alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO2). Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media:
Full water jet

* 5.2. Special hazards arising from the substance or mixture
Hazardous combustion products:
Gases/vapours, toxic (CO, CO2)

5.3. Advice for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Personal precautions:
Remove persons to safety.

Protective equipment:
Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders
Personal protection equipment:
Personal protection equipment: see section 8

6.2. Environmental precautions
Do not allow to enter into surface water or drains.

* 6.3. Methods and material for containment and cleaning up
For containment:
Collect spillage. Measures to prevent aerosol and dust generation: Wet clean or vacuum up solids.

6.4. Reference to other sections
Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

6.5. Additional information
Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:
Wear personal protection equipment (refer to section 8).

Fire prevent measures:
Keep away from sources of ignition - No smoking.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin.

*

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Store in a well-ventilated place.

Packaging materials:
Keep/Store only in original container.

Requirements for storage rooms and vessels:
Keep container tightly closed.

Hints on storage assembly:
Prohibition on mixed storage has to be followed

Storage class (TRGS 510, Germany): 10 – Combustible liquids that cannot be assigned to any of the above storage classes

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

*

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
CZ	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ② 0.3 mg/m³
PL	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.05 mg/m³ ⑤ (wdychalna frakcja)
IOELV (EU)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ (silver compounds, soluble, calculated as Ag)
WEL (GB)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ (compounds, soluble; calculated as Ag)
NL	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ (verbindingen, oplosbaar, berekend als Ag)
NIOSH (US)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ compounds, soluble; calculated as Ag
IOELV (EU)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (metal)

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
WEL (GB)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (metal)
NL	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (metaal)
PL	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.05 mg/m³ ⑤ (związki srebra, nierozpuszczalny, obliczono jako Ag)
PL	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ (związki srebra, rozpuszczalny, obliczono jako Ag)
BG	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ съединения, разтворим; Изчисление Ag
BG	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³
CZ	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ② 0.03 mg/m³ ⑤ (stříbrné sloučeniny, rozpustný, vypočtený jako Ag, vdechovatelná frakce)
ACGIH (US)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ compounds, soluble
OSHA (US)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³
RO	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (metal)
RO	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ compușii solubil calculat ca Ag
Alberta (CA)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (metal)
Alberta (CA)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ compounds, soluble
BC (CA)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ② 0.03 mg/m³
JP	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³
Québec (CA)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ compounds, soluble; calculated as Ag
SI	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ② 0.02 mg/m³ ⑤ (frakcija ki jo je mogoče vdihniti)

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TW	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³
RU	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	③ 1 mg/m³
RU	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	③ 0.5 mg/m³
TW	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ (##)
MY	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ sebatian boleh larut dikira sebagai Ag
MY	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (logam)
BG	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ метал, Изчисление Ag
TR	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³ ⑤ (gümüş bileşikleri, çözünür, Hesaplanırken Ag)
TR	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (metal)
Québec (CA)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³ ⑤ (metal)
NIOSH (US)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.01 mg/m³
ACGIH (US)	silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	① 0.1 mg/m³

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	49 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	13.9 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	8.3 mg/kg	① DNEL worker ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	0.015 mg/l	① PNEC aquatic, freshwater
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	0.0015 mg/l	① PNEC aquatic, marine water
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	7.5 mg/l	① PNEC sewage treatment plant
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	0.017 mg/kg	① PNEC sediment, freshwater
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	0.0017 mg/kg	① PNEC sediment, marine water
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol **CAS No.:** 25265-77-4 **EC No.:** 246-771-9	0.13 mg/kg	① PNEC soil, freshwater

* **8.2. Exposure controls**

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection (EN 166)

Skin protection:

Tested protective gloves must be worn (EN ISO 374) Suitable material: NBR (Nitrile rubber), CR (polychloroprene, chloroprene rubber), PVC (polyvinyl chloride). Breakthrough times and swelling properties of the material must be taken into consideration.

Respiratory protection:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

* **9.1. Information on basic physical and chemical properties**

Appearance

Physical state: Liquid
Colour: dark grey
Odour: not determined

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	= 3.5		② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Melting point	= -50 °C		② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Freezing point	*not determined*		
Initial boiling point and boiling range	= 244 °C		② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Decomposition temperature	*not determined*		
Flash point	114 °C		① closed cup ② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Evaporation rate	*not determined*		
Auto-ignition temperature	380 °C		② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Upper/lower flammability or explosive limits	*not determined*		
Vapour pressure	= 0.004 mmHg	20 °C	② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Vapour density	= 7.5		② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Density	= 2.7 g/cm³	25 °C	② calculated from ingredients
Relative density	*not determined*		
Bulk density	*not determined*		
Water solubility	*not determined*		
Partition coefficient: n-octanol/water	= 3.47		② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Dynamic viscosity	= 16 mPa*s	20 °C	② Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)
Kinematic viscosity	*not determined*		

9.2. Other information
No data available

SECTION 10: Stability and reactivity

* **10.1. Reactivity**
This material is considered to be non-reactive under normal use conditions.

10.2. Chemical stability
The mixture is chemically stable under recommended conditions of storage, use and temperature.

* **10.3. Possibility of hazardous reactions**
No known hazardous reactions.

10.4. Conditions to avoid
Do not store at temperatures above 35 °C

10.5. Incompatible materials
Oxidising agent

* **10.6. Hazardous decomposition products**
No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Substance name	Toxicological information
silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	**LD_{50} oral:** >5,000 mg/kg (Rat) OECD Prüfrichtlinie 401

Acute oral toxicity:
Based on available data, the classification criteria are not met.

Acute dermal toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Based on available data, the classification criteria are not met.

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

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:
Based on available data, the classification criteria are not met.

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.

Additional information:
No data available

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

12.1. Toxicity

Substance name	Toxicological information
silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	**LC_{50}:** =0.0102 mg/l 4 d (fish, anguilla anguilla) Partikelgröße < 1 µm **LC_{50}:** 0.0102 mg/l 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) **EC_{50}:** 0.0184 mg/l 4 d (Algae/water plant, Pseudokirchneriella subcapitata (Grünalge)) **NOEC:** 0.0059 mg/l (Algae/water plant, Danio rerio (zebrafish))

Aquatic toxicity:
Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability
No data available

* **12.3. Bioaccumulative potential**

Substance name	Log K_{OW}	Bioconcentration factor (BCF)
silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3		70

Partition coefficient: n-octanol/water:
= 3.47; Remark: Overtaken from SDS of the organic solvent of the paste (CAS#25265-77-4)

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
silver **CAS No.:** 7440-22-4 **EC No.:** 231-131-3	—

12.6. Endocrine disrupting properties
No data available

12.7. Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

16 05 06 *	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

**: Evidence for disposal must be provided.*

Waste code packaging

Remark:
Handle contaminated packages in the same way as the substance itself.

Waste treatment options

Appropriate disposal / Product:
Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:
Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
* **14.1. UN number or ID number**			
UN 3082	UN 3082	UN 3082	UN 3082
* **14.2. UN proper shipping name**			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (silver)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (silver)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (silver)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (silver)
* **14.3. Transport hazard class(es)**			
 9	 9	 9	 9

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
* **14.4. Packing group**			
III	III	III	III
* **14.5. Environmental hazards**			
		 MARINE POLLUTANT	
* **14.6. Special precautions for user**			
Special provisions: 274 | 335 | 375 | 601 **Limited quantity (LQ):** 5 L **Excepted Quantities (EQ):** E1 **Hazard identification number (Kemler No.):** 90 **Classification code:** M6 **Tunnel restriction code:** (-)	**Special provisions:** 274 | 335 | 375 | 601 **Limited quantity (LQ):** 5 L **Excepted Quantities (EQ):** E1 **Classification code:** M6	**Special provisions:** 274 | 335 | 969 **Limited quantity (LQ):** 5 L **Excepted Quantities (EQ):** E1 **EmS-No.:** F-A, S-F	**Special provisions:** A97 | A158 | A197 | A215 **Limited quantity (LQ):** Y964 **Excepted Quantities (EQ):** E1

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

No data available

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

* 16.1. Indication of changes

1.1.	Product identifier
2.2.	Label elements
4.1.	Description of first aid measures
5.2.	Special hazards arising from the substance or mixture
6.3.	Methods and material for containment and cleaning up
7.2.	Conditions for safe storage, including any incompatibilities
8.1.	Control parameters
8.2.	Exposure controls
9.1.	Information on basic physical and chemical properties
10.1.	Reactivity
10.3.	Possibility of hazardous reactions
10.6.	Hazardous decomposition products
12.3.	Bioaccumulative potential
14.1.	UN number or ID number
14.2.	UN proper shipping name
14.3.	Transport hazard class(es)
14.4.	Packing group
14.5.	Environmental hazards

14.6.	Special precautions for user
16.1.	Indication of changes

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Hazardous to the aquatic environment *(Aquatic Acute 1)*	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	Calculation method.

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

No data available

16.6. Training advice

No data available

16.7. Additional information

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.

* Data changed compared with the previous version