

SAFETY DATA SHEET

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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English Translation Of German SDS

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

1.1. Product identifier

Product form : Mixture
 Trade name : blue spot
 Product code : 300101
 SDS Number : 5326
 Product use : Professional use

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

1.2.1. Relevant identified uses

Use of the substance/mixture : For medical use
 Indicator of contact points for dental and technical applications

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Dentaco GmbH & Co.KG
 Max-Keith-Str. 46
 45136 Essen
 Deutschland
 Tel.: + 49 (0) 201/ 8098290
 Fax: + 49 (0) 201/ 80982999
 Internet: www.dentaco.de ; info@dentaco.de
 E-Mail: HSE@rle.de

1.4. Emergency telephone number

+ 49 (0) 201/ 8098290 (Mo. - Fr. 09:00 - 17:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Physical hazards	Flammable liquids, Category 2	H225	Highly flammable liquid and vapour.
Health hazards	Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms



Signal word	Danger
Hazard statements	
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
Precautionary statements	
Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear eye protection.
Response	
P337+P313	If eye irritation persists: Get medical advice/attention.
EUH-statements	
	EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
ethanol	64-17-5 200-578-6 603-002-00-5 01-2119457610-43-XXXX	50 - < 60	Flam. Liq. 2, H225 Eye Irrit. 2, H319	(50 ≤C ≤ 100) Eye Irrit. 2, H319

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Immediately call a POISON CENTER/doctor. Do not induce vomiting. Rinse mouth.

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

Symptoms/effects: : Causes serious eye irritation.

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

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder.
Unsuitable extinguishing media	: Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour.
Reactivity in case of fire	: During fire, gases hazardous to health may be formed.
Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions	: Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Wear fire/flammable resistant/retardant clothing.
Other information	: Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Do not handle until all safety precautions have been read and understood. Eliminate every possible source of ignition.
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6.1.1. For non-emergency personnel

Protective equipment	: Use personal protective equipment as required. Wear appropriate protective equipment and clothing during clean-up.
Emergency procedures	: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

6.1.2. For emergency responders

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Remove all sources of ignition. Keep away from combustible material. Stop the leak.
Other information	: Prevent entry into waterways, sewer, basements or confined areas.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Keep away from sources of ignition - No smoking. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Ground/bond container and receiving equipment. Avoid prolonged exposure. Avoid contact with eyes. Observe good industrial hygiene practices. Do not eat, drink or smoke when using this product. Wear appropriate personal protective equipment. Keep only in original container. Avoid release to the environment.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep away from ignition sources. Protect from sunlight. Store locked up.
Storage class (LGK, TRGS 510)	: LGK 3 - Flammable liquids

7.3. Specific end use(s)

For medical use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

ethanol (64-17-5)

Germany - Occupational Exposure Limits (TRGS 900)

Local name	Ethanol
AGW (OEL TWA) [1]	960 mg/m ³
AGW (OEL TWA) [2]	500 ppm
AGW (OEL C)	1920 mg/m ³
AGW (OEL C) [ppm]	1000 ppm
Peak exposure limitation factor	2(II)
Remark	DFG,Y
Regulatory reference	TRGS900

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Titanium dioxide (13463-67-7)

DNEL/DMEL (Workers)

Long-term - systemic effects, inhalation	10 mg/m ³
Long-term - local effects, inhalation	10 mg/m ³

DNEL/DMEL (General population)

Long-term - systemic effects, oral	700 mg/kg bodyweight/day
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PNEC (Water)

PNEC aqua (freshwater)	0.127 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent, freshwater)	0.61 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	1000 mg/kg dwt
PNEC sediment (marine water)	100 mg/kg dwt

PNEC (Soil)

PNEC soil	100 mg/kg dwt
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PNEC (Oral)

PNEC oral (secondary poisoning)	1667 mg/kg food
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PNEC (STP)

PNEC sewage treatment plant	100 mg/l
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ethanol (64-17-5)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	343 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	950 mg/m ³
Long-term - local effects, inhalation	1900 mg/m ³

DNEL/DMEL (General population)

Long-term - systemic effects, oral	87 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	114 mg/m ³
Long-term - systemic effects, dermal	206 mg/kg bodyweight/day
Long-term - local effects, inhalation	950 mg/m ³

PNEC (Water)

PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC aqua (intermittent, freshwater)	2.75 mg/l

PNEC (Sediment)

PNEC sediment (freshwater)	3.6 mg/kg dwt
PNEC sediment (marine water)	2.9 mg/kg dwt

PNEC (Soil)

PNEC soil	0.63 mg/kg dwt
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PNEC (Oral)

PNEC oral (secondary poisoning)	380 mg/kg food
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PNEC (STP)

PNEC sewage treatment plant	580 mg/l
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8.1.5. Control banding

No additional information available

8.2. Exposure controls**8.2.1. Appropriate engineering controls****Appropriate engineering controls:**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.2.2. Personal protection equipment**Personal protective equipment:**

Wear recommended personal protective equipment.

8.2.2.1. Eye and face protection**Eye protection:**

If contact is likely, safety glasses with side shields are recommended.

8.2.2.2. Skin protection**Skin and body protection:**

Wear suitable protective clothing

Hand protection:

Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls

Other skin protection**Materials for protective clothing:**

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment

8.2.2.3. Respiratory protection**Respiratory protection:**

In case of inadequate ventilation wear respiratory protection.

Respiratory protection

Device	Filter type	Condition	Standard
	Type AX - Low-boiling (<65 °C) organic compounds, Type P2		

8.2.2.4. Thermal hazards

Thermal hazard protection:

Wear appropriate thermal protective clothing, when necessary.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Inform appropriate managerial or supervisory personnel of all environmental releases.

Other information:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light blue.
Appearance	: Liquid.
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: 78 °C
Flammability	: Extremely flammable liquid and vapour
Oxidising properties	: None.
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: 12 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Log Kow	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Various hydrocarbon fragments.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Based on available data, the classification criteria are not met
Acute toxicity (dermal)	: Based on available data, the classification criteria are not met
Acute toxicity (inhalation)	: 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	: Causes serious eye irritation.
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

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and symptoms : Occupational exposure to the substance or mixture may cause adverse effects

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Hazardous to the aquatic environment, short-term (acute)	: Based on available data, the classification criteria are not met
Hazardous to the aquatic environment, long-term (chronic)	: Based on available data, the classification criteria are not met

12.2. Persistence and degradability

ethanol (64-17-5)

Persistence and degradability (OECD 301D method). 80 % - 85 % biodegradation.

12.3. Bioaccumulative potential

ethanol (64-17-5)

Log Kow -0.35 at 20 °C

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

blue'spot

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Waste treatment methods : Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Additional information : Dispose in accordance with all applicable regulations.

European List of Waste (LoW) code : 14 06 03* - other solvents and solvent mixtures
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : UN 1170
UN-No. (IMDG) : UN 1170
UN-No. (IATA) : UN 1170
UN-No. (ADN) : UN 1170
UN-No. (RID) : UN 1170

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ETHANOL (ETHYL ALCOHOL) / ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IMDG) : ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (IATA) : Ethanol
Proper Shipping Name (ADN) : ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (RID) : ETHANOL (ETHYL ALCOHOL)

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3

IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3

IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3

ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3

RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3

14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available.

14.6. Special precautions for user**Overland transport**

Classification code (ADR) : F1
Special provisions (ADR) : 144, 601
Limited quantities (ADR) : 1I
Packing instructions (ADR) : P001, IBC02, R001
Hazard identification number (Kemler No.) : 33
Tunnel restriction code (ADR) : D/E

Transport by sea

Special provisions (IMDG) : 144
Limited quantities (IMDG) : 1 L
Packing instructions (IMDG) : P001
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3, A58, A180
ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 144, 601
Limited quantities (ADN) : 1 L
Carriage permitted (ADN) : T

Rail transport

Classification code (RID) : F1

Special provisions (RID) : 144, 601
 Limited quantities (RID) : 1L
 Packing instructions (RID) : P001, IBC02, R001
 Hazard identification number (RID) : 33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(a)	blue spot ; ethanol
3(b)	blue spot ; ethanol
40.	ethanol

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Other information, restriction and prohibition regulations : Directive 94/33/EC on the protection of young people at work, as amended. Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. For details, refer to section 3 and 8.

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not applicable

Seveso III Part I (Categories of dangerous substances)

	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
P5c FLAMMABLE LIQUIDS	5000	50000
Flammable liquids, Categories 2 or 3 not covered by P5a and P5b		

15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)
 Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
 Observe restrictions according Prohibition of Chemicals Ordinance (ChemVerbotsV)
 For details, refer to section 3 and 8

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Listed in the 12. BImSchV (Annex I) under: 1.2.5.3
 - Quantity threshold for operational area under § 1 para. 1
 - Sentence 1 :5000000 kg
 - Sentence 2 :50000000 kg

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

Label elements. Section 1 - Section 16. ANNEX II.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAO	Cargo Aircraft Only

CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PCA	Passenger and Cargo Aircraft
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN	REACH Registration no.
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
TWA	Time Weighted Average. The average concentration of a chemical in air over the total exposure time-usually an 8-hour workday.
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative

Data sources	:	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.
Training advice	:	Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements

EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Flam. Liq. 2	H225	Expert judgment
Eye Irrit. 2	H319	Calculation method

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.