

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 140XXX Soft Wax
Print date 28.04.2016 Revision date 18.04.2016
Version 1.15 Issue date 18.04.2016

EN
Page 1 / 6

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

1.1. Product identifiers

Article No. (manufacturer/supplier): 140XXX
Identification of the substance or mixture Soft Wax
all colours and forms

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

Relevant identified uses:
Surface repair wax

1.3. Details of the supplier of the safety data sheet

distributor

Konig North America LLC
2800 Black Lake Place, Unit D Telephone: 1-215-426-6216
Philadelphia, PA 19154 (USA) Telefax: 1-215-464-2144

Dept. responsible for information:

laboratory Telephone: 1-215-426-6216
Only available during office hours: M-F 8:00am - 4:00pm

E-mail (competent person) brian@konigtouchup.com

1.4. Emergency telephone number

Emergency Contact: CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.2. Label elements

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

Hazard pictograms

Hazard statements

n.a.

Precautionary statements

n.a.

contains:

n.a.

Supplemental Hazard information (EU)

n.a.

2.3. Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Product description / chemical characterization

Description Thermoplastic fillers

Hazardous ingredients

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

EC No.

REACH No.

CAS No.

Chemical name

INDEX No.

classification:

Wt %

Remark

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 140XXX Soft Wax
Print date 28.04.2016 Revision date 18.04.2016
Version 1.15 Issue date 18.04.2016

EN
Page 2 / 6

n.a.

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

SECTION 7: Handling and storage

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 140XXX Soft Wax
Print date 28.04.2016 Revision date 18.04.2016
Version 1.15 Issue date 18.04.2016

EN
Page 3 / 6

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Precautions against fire and explosion:

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSivO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (BGR 132)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

n.a.

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (DGUV-R 112-190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Filtering device (full mask or mouthpiece) with filter: A

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 140XXX
Print date 28.04.2016
Version 1.15

Soft Wax
Revision date 18.04.2016
Issue date 18.04.2016

EN
Page 4 / 6

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state solid
Colour refer to label
Odour odourless

Safety relevant basis data	Unit	Method	Remark
Flash point:	n.a.		
Ignition temperature in °C:	n.a.		
Lower explosion limit	n.a.		
Upper explosion limit	n.a.		
Vapour pressure at 20 °C:	n.a.		
Density at 20 °C:	0,92 g/cm³	calculated.	
Vapour density; Bulk density	n.a. kg/m³		
Water solubility (g/L)	insoluble		
pH at 20 °C:	N.A.		
Viscosity at 100 °C	15 mPa·s		
Distribution coefficient (n-octanol / water) (log P O/W)	n.a.		
solvent content:			
Organic solvents:	0 Wt %		
Water:	0 Wt %		
Initial boiling point and boiling range	n.a.		
Melting point/freezing point	n.a. °C		
Evaporation rate	n.a. °C		
Auto-ignition temperature:	n.a. °C		
Decomposition temperature:	n.a. °C		

9.2. Other information:

Explosive properties not explosive.
Not oxidising.
Odour threshold: not determined
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 10: Stability and reactivity

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides. Keine Entstehungsgefahr der oben angeführten Produkte bei sachgemäßem Umgang

SECTION 11: Toxicological information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]
No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

Toxicological data are not available.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 140XXX Soft Wax
Print date 28.04.2016 Revision date 18.04.2016
Version 1.15 Issue date 18.04.2016

EN
Page 5 / 6

skin corrosion/irritation; Serious eye damage/eye irritation

Toxicological data are not available.

Respiratory or skin sensitisation

Toxicological data are not available.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself.

SECTION 12: Ecological information

overall evaluation

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

There is no information available on the preparation itself.

Do not allow to enter into surface water or drains.

12.1. Toxicity

Toxicological data are not available.

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

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

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

080410 waste adhesives and sealants other than those mentioned in
080409

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 140XXX Soft Wax
Print date 28.04.2016 Revision date 18.04.2016
Version 1.15 Issue date 18.04.2016

EN
Page 6 / 6

No dangerous good in sense of this transport regulation.

14.1. UN number

n.a.

14.2. UN proper shipping name

14.3. Transport hazard class(es)

n.a.

14.4. Packing group

n.a.

14.5. Environmental hazards

Land transport (ADR/RID) n.a.

Marine pollutant n.a.

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code -

Sea transport (IMDG)

EmS-No. n.a.

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

not applicable

SECTION 15: Regulatory information

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

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 0,000

VOC-value (in g/L) ASTM D 2369: 0,000

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

Full text of classification in section 3:

Additional information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 1 / 9

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

1.1. Product identifiers

Article No. (manufacturer/supplier): 210X00
Identification of the substance or mixture Felt Touch-up Dye Pen
Art.No. 210000, 210900
all colours, all gloss values

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

Relevant identified uses:

Coating (Paint, Varnish).

Uses advised against:

Do not use for products which come into contact with the food stuffs.

1.3. Details of the supplier of the safety data sheet

distributor

Konig North America LLC
2800 Black Lake Place, Unit D Telephone: 1-215-426-6216
Philadelphia, PA 19154 (USA) Telefax: 1-215-464-2144

Dept. responsible for information:

laboratory Telephone: 1-215-426-6216
Only available during office hours: M-F 8:00am - 4:00pm

E-mail (competent person) brian@konigtouchup.com

1.4. Emergency telephone number

Emergency Contact: CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.

2.2. Label elements

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

Hazard pictograms



Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P370 + P378 In case of fire: Use foam to extinguish.
P405 Store locked up.
P501 Dispose of contents/container to industrial incineration plant.

contains:

1-methoxy-2-propanol

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 2 / 9

Supplemental Hazard information (EU)

n.a.

2.3. Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Product description / chemical characterization

Description Dye solution

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
203-539-1 107-98-2 603-064-00-3	01-2119457435-35-xxxx 1-methoxy-2-propanol Flam. Liq. 3 H226 / STOT SE 3 H336	50 < 100
200-578-6 64-17-5 603-002-00-5	01-2119457610-43-xxxx ethanol Flam. Liq. 2 H225	20 < 25
285-082-8 85029-57-8	Amines, C10-14-branched and linear alkyl, bis[2,4-dihydro-4-[(2-hydroxy-4-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]chromate(1-) Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	0,1 < 0,25
216-455-5 1589-47-5 603-106-00-0	2-methoxypropanol Flam. Liq. 3 H226 / Repr. 1B H360D / STOT SE 3 H335 / Skin Irrit. 2 H315 / Eye Dam. 1 H318	0,1 < 0,25

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 3 / 9



SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Precautions against fire and explosion:

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (BGR 132)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 4 / 9



SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

1-methoxy-2-propanol

INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2

TWA: 375 mg/m³; 100 ppm

STEL: 560 mg/m³; 150 ppm

ethanol

INDEX No. 603-002-00-5 / EC No. 200-578-6 / CAS No. 64-17-5

TWA: 1920 mg/m³; 1000 ppm

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

1-methoxy-2-propanol

INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2

DNEL long-term dermal (systemic), Workers: 50,6 mg/kg

DNEL acute inhalative (local), Workers: 553,5 mg/m³

DNEL long-term inhalative (systemic), Workers: 369 mg/m³

DNEL long-term oral (repeated), Consumer: 3,3 mg/kg

DNEL long-term dermal (systemic), Consumer: 18,1 mg/kg

DNEL long-term inhalative (systemic), Consumer: 43,9 mg/m³

ethanol

INDEX No. 603-002-00-5 / EC No. 200-578-6 / CAS No. 64-17-5

DNEL long-term dermal (systemic), Workers: 343 mg/kg

DNEL acute inhalative (local), Workers: 1900 mg/m³

DNEL long-term inhalative (systemic), Workers: 950 mg/m³

DNEL long-term oral (repeated), Consumer: 87 mg/kg

DNEL acute dermal, short-term (systemic), Consumer: 950 mg/kg

DNEL long-term dermal (systemic), Consumer: 206 mg/kg

DNEL acute inhalative (local), Consumer: 950 mg/m³

DNEL long-term inhalative (systemic), Consumer: 114 mg/m³

PNEC:

1-methoxy-2-propanol

INDEX No. 603-064-00-3 / EC No. 203-539-1 / CAS No. 107-98-2

PNEC aquatic, freshwater: 10 mg/L

PNEC sediment, freshwater: 41,6 mg/kg

PNEC sediment, marine water: 4,17 mg/kg

ethanol

INDEX No. 603-002-00-5 / EC No. 200-578-6 / CAS No. 64-17-5

PNEC aquatic, freshwater: 0,96 mg/L

PNEC aquatic, marine water: 0,79 mg/L

PNEC aquatic, intermittent release: 2,75 mg/L

PNEC sediment, freshwater: 3,6 mg/kg

PNEC sediment, marine water: 2,9 mg/kg

PNEC, Soil: 0,63 mg/kg

PNEC sewage treatment plant (STP): 580 mg/L

PNEC Secondary Poisoning: 0,72 mg/kg

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 5 / 9

(DGUV-R 112-190). Use only respiratory protection equipment with CE-symbol including four digit test number.
Filtering device (full mask or mouthpiece) with filter: A

Hand protection

For prolonged or repeated handling the following glove material must be used: Butyl caoutchouc (butyl rubber)
Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state liquid
Colour refer to label
Odour Preparations containing solvent

Safety relevant basis data	Unit	Method	Remark
Flash point:	12 °C	calculated.	
Ignition temperature in °C:	270 °C	calculated.	
Lower explosion limit	1,9 Vol-%	calculated.	
Upper explosion limit	15,0 Vol-%	calculated.	
Vapour pressure at 20 °C:	21,67 mbar	calculated.	
Density at 20 °C:	0,90 g/cm³	calculated.	
Vapour density; Bulk density	n.a. kg/m³		
Water solubility (g/L)	partially soluble		
pH at 20 °C:	N.A.		
Viscosity at 20 °C	16 s 4 mm	DIN 53211	
Distribution coefficient (n-octanol / water) (log P O/W)	n.a.		
solvent content:			
Organic solvents:	92 Wt %		
Water:	0 Wt %		
Initial boiling point and boiling range	78 °C	calculated.	
Melting point/freezing point	n.a. °C		
Evaporation rate	n.a. °C		
Auto-ignition temperature:	n.a. °C		
Decomposition temperature:	n.a. °C		

9.2. Other information:

Explosive properties not explosive.
Not oxidising.
Odour threshold: not determined
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 10: Stability and reactivity

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.3. Possibility of hazardous reactions

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 6 / 9

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides. Keine Entstehungsgefahr der oben angeführten Produkte bei sachgemäßem Umgang

SECTION 11: Toxicological information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

Amines, C10-14-branched and linear alkyl, bis[2,4-dihydro-4-[(2-hydroxy-4-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]chromate(1-)

oral, LD50, Rat: > 5000 mg/kg

Based on available data the classification criteria are not met.

1-methoxy-2-propanol

oral, LD50, Rat: 5000 mg/kg

dermal, LD50, Rabbit: 13500 mg/kg

inhalative (vapours), LC50, Rat: > 20 mg/L (4 h)

Based on available data the classification criteria are not met.

ethanol

oral, LD50, Rat: > 2000 mg/kg

Method: OECD 401

dermal, LD50, Rabbit: > 2000 mg/kg

Method: OECD 402

inhalative (vapours), LC50, Rat: > 20 mg/L (4 h)

Based on available data the classification criteria are not met.

skin corrosion/irritation; Serious eye damage/eye irritation

2-methoxypropanol

Skin (4 h)

Causes skin irritation.

Eyes

Causes serious eye damage..

Respiratory or skin sensitisation

Toxicological data are not available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

2-methoxypropanol

Reproductive toxicity

May damage the unborn child.

Specific target organ toxicity

2-methoxypropanol

Specific target organ toxicity (single exposure), Irritation:

May cause respiratory irritation.

1-methoxy-2-propanol

Specific target organ toxicity (single exposure), drowsiness:

May cause drowsiness or dizziness.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

Other observations:

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 7 / 9

respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

EC No. CAS No.	Chemical name	Classification according to Regulation (EC) No. 1272/2008 [CLP]
216-455-5 1589-47-5	2-methoxypropanol	Repr. 1B

Remark

There is no information available on the preparation itself .

SECTION 12: Ecological information

overall evaluation

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

12.1. Toxicity

Amines, C10-14-branched and linear alkyl, bis[2,4-dihydro-4-[(2-hydroxy- 4-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]chromate(1-)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 0,1 - 1 mg/L (48 h)

Algae toxicity, ErC50:

Very toxic to aquatic life.

Bacteria toxicity, EC20, Activated sludge: > 1000 mg/L

Method: ISO 8192

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge.

1-methoxy-2-propanol

Fish toxicity, LC50, Leuciscus idus (golden orfe): 6812 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 21100 - 25900 mg/L (48 h)

Based on available data the classification criteria are not met.

ethanol

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 15300 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 10000 mg/L (48 h)

Algae toxicity, ErC50, Chlorella vulgaris: 275 mg/L (72 h)

Method: OECD 201

Bacteria toxicity, EC50, Pseudomonas putida: 5800 mg/L (4 h)

Based on available data the classification criteria are not met.

Long-term Ecotoxicity

Amines, C10-14-branched and linear alkyl, bis[2,4-dihydro-4-[(2-hydroxy- 4-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]chromate(1-)

Fish toxicity, LC50: (96 h)

Very toxic to aquatic life with long lasting effects.

Activated sludge, EC20: > 1000 mg/L

Method: ISO 8192

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge.

1-methoxy-2-propanol

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: > 1000 mg/L (168 h)

Based on available data the classification criteria are not met.

12.2. Persistence and degradability

Amines, C10-14-branched and linear alkyl, bis[2,4-dihydro-4-[(2-hydroxy- 4-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)]chromate(1-)

:

In accordance with the required stability the product is poorly biodegradable.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 210X00 Felt Touch-up Dye Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 8 / 9

1-methoxy-2-propanol
Biodegradation: > 70 %
Method: DOC reduction.
Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

1-methoxy-2-propanol
Distribution coefficient (n-octanol / water) (log P O/W): 0,43
ethanol
Distribution coefficient (n-octanol / water) (log P O/W): -0,3

Bioconcentration factor (BCF)

ethanol
Bioconcentration factor (BCF): 0,66
No indication of bioaccumulation potential.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

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

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

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

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number

UN 1263

14.2. UN proper shipping name

Land transport (ADR/RID): Paint
Sea transport (IMDG): PAINT
Air transport (ICAO-TI / IATA-DGR): Paint

14.3. Transport hazard class(es)

3

14.4. Packing group

II

14.5. Environmental hazards

Land transport (ADR/RID) n.a.
Marine pollutant n.a.

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 210X00
Print date 28.04.2016
Version 1.20

Felt Touch-up Dye Pen
Revision date 18.04.2016
Issue date 18.04.2016

EN
Page 9 / 9

tunnel restriction code

D/E
SPECIAL PROVISIONS 640D

Sea transport (IMDG)

EmS-No.

F-E, S-E

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

not applicable

SECTION 15: Regulatory information

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

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 829,483

VOC-value (in g/L) ASTM D 2369: 829,483

according to EU-regulation 2004/42/EC (appendix II)

EU limit value for this product (cat. (Cat. B/e)): 840 g/l (2007)/840 g/l (2010).

This product contains max 829,483 g/l VOC.

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

For the following substances of this preparation a chemical safety assessment has been carried out:

EC No. CAS No.	Chemical name	REACH No.
203-539-1 107-98-2	1-methoxy-2-propanol	01-2119457435-35-xxxx
200-578-6 64-17-5	ethanol	01-2119457610-43-xxxx

SECTION 16: Other information

Full text of classification in section 3:

Flam. Liq. 3 / H226

flammable liquids

Flammable liquid and vapour.

STOT SE 3 / H336

Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.

Flam. Liq. 2 / H225

flammable liquids

Highly flammable liquid and vapour.

Aquatic Acute 1 / H400

Hazardous to the aquatic environment

Very toxic to aquatic life.

Aquatic Chronic 1 / H410

Hazardous to the aquatic environment

Very toxic to aquatic life with long lasting effects.

Repr. 1B / H360D

Reproductive toxicity

May damage the unborn child.

STOT SE 3 / H335

Specific target organ toxicity (single exposure)

May cause respiratory irritation.

Skin Irrit. 2 / H315

skin corrosion/irritation

Causes skin irritation.

Eye Dam. 1 / H318

Serious eye damage/eye irritation

Causes serious eye damage.

Additional information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00
Print date 28.04.2016
Version 1.20

Colour Edging Pen
Revision date 18.04.2016
Issue date 18.04.2016

EN
Page 1 / 11

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

1.1. Product identifiers

Article No. (manufacturer/supplier): 241X00
Identification of the substance or mixture Colour Edging Pen
Art.No.: 241000, 241900
all colours, all gloss values

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

Relevant identified uses:

Coating (Paint, Varnish).

Uses advised against:

Do not use for products which come into contact with the food stuffs.

1.3. Details of the supplier of the safety data sheet

distributor

Konig North America LLC
2800 Black Lake Place, Unit D
Philadelphia, PA 19154 (USA)

Telephone: 1-215-426-6216
Telefax: 1-215-464-2144

Dept. responsible for information:

laboratory

Only available during office hours:

Telephone: 1-215-426-6216
M-F 8:00am - 4:00pm

E-mail (competent person)

brian@konigtouchup.com

1.4. Emergency telephone number

Emergency Contact:

CHEMTREC 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms



Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 2 / 11

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P370 + P378 In case of fire: Use foam to extinguish.
P405 Store locked up.
P501 Dispose of contents/container to industrial incineration plant.

contains:

4-methylpentan-2-one
n-butyl acetate

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Product description / chemical characterization

Description Acrylic resin lacquer

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification:	Wt % Remark
204-658-1 123-86-4 607-025-00-1	01-2119485493-29-xxxx n-butyl acetate Flam. Liq. 3 H226 / STOT SE 3 H336	25 < 50
203-550-1 108-10-1 606-004-00-4	01-2119473980-30-xxxx 4-methylpentan-2-one Flam. Liq. 2 H225 / Acute Tox. 4 H332 / Eye Irrit. 2 H319 / STOT SE 3 H335	20 < 25
918-668-5	01-2119455851-35-xxxx Hydrocarbons, C9, aromatics Flam. Liq. 3 H226 / Asp. Tox. 1 H304 / STOT SE 3 H335 / STOT SE 3 H336 / Aquatic Chronic 2 H411	7 < 10
201-159-0 78-93-3 606-002-00-3	01-2119457290-43-xxxx butanone Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336	7 < 10
203-603-9 108-65-6 607-195-00-7	01-2119475791-29-xxxx 2-methoxy-1-methylethyl acetate Flam. Liq. 3 H226	3 < 5

Additional information

* Substance with a common (EC) occupational exposure limit value.
Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00
Print date 28.04.2016
Version 1.20

Colour Edging Pen
Revision date 18.04.2016
Issue date 18.04.2016

EN
Page 3 / 11

respiration.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13). Clean using cleansing agents. Do not use solvents.

6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Precautions against fire and explosion:

Vapours are heavier than air. Vapours form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 4 / 11

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (BGR 132)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

butanone

INDEX No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

TWA: 600 mg/m³; 200 ppm

STEL: 899 mg/m³; 300 ppm

4-methylpentan-2-one

INDEX No. 606-004-00-4 / EC No. 203-550-1 / CAS No. 108-10-1

TWA: 208 mg/m³; 50 ppm

STEL: 416 mg/m³; 100 ppm

n-butyl acetate

INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

TWA: 724 mg/m³; 150 ppm

STEL: 966 mg/m³; 200 ppm

2-methoxy-1-methylethyl acetate

INDEX No. 607-195-00-7 / EC No. 203-603-9 / CAS No. 108-65-6

TWA: 274 mg/m³; 50 ppm

STEL: 548 mg/m³; 100 ppm

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

4-methylpentan-2-one

INDEX No. 606-004-00-4 / EC No. 203-550-1 / CAS No. 108-10-1

DNEL long-term dermal (systemic), Workers: 11,8 mg/kg

DNEL acute inhalative (local), Workers: 208 mg/m³

DNEL acute inhalative (systemic), Workers: 208 mg/m³

DNEL long-term inhalative (local), Workers: 83 mg/m³

DNEL long-term inhalative (systemic), Workers: 83 mg/m³

DNEL long-term oral (repeated), Consumer: 4,2 mg/kg

DNEL long-term dermal (systemic), Consumer: 4,2 mg/kg

DNEL acute inhalative (local), Consumer: 155,2 mg/m³

DNEL acute inhalative (systemic), Consumer: 155,2 mg/m³

DNEL long-term inhalative (local), Consumer: 14,7 mg/m³

DNEL long-term inhalative (systemic), Consumer: 14,7 mg/m³

Hydrocarbons, C9, aromatics

EC No. 918-668-5

DNEL long-term dermal (systemic), Workers: 25 mg/kg

DNEL long-term inhalative (systemic), Workers: 150 mg/m³

DNEL long-term oral (repeated), Consumer: 11 mg/kg

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 5 / 11

DNEL long-term dermal (systemic), Consumer: 11 mg/kg
DNEL long-term inhalative (systemic), Consumer: 32 mg/m³

butanone

INDEX No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

DNEL long-term dermal (systemic), Workers: 1161 mg/kg
DNEL long-term inhalative (systemic), Workers: 600 mg/m³
DNEL long-term oral (repeated), Consumer: 31 mg/kg
DNEL acute dermal, short-term (local), Consumer: 412 mg/kg
DNEL long-term dermal (systemic), Consumer: 412 mg/kg
DNEL long-term inhalative (systemic), Consumer: 106 mg/m³

n-butyl acetate

INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

DNEL acute inhalative (systemic), Workers: 960 mg/m³
DNEL long-term inhalative (systemic), Workers: 480 mg/m³
DNEL acute inhalative (systemic), Consumer: 859,7 mg/m³
DNEL long-term inhalative (systemic), Consumer: 102,34 mg/m³

PNEC:

4-methylpentan-2-one

INDEX No. 606-004-00-4 / EC No. 203-550-1 / CAS No. 108-10-1

PNEC aquatic, freshwater: 0,6 mg/L
PNEC aquatic, marine water: 0,06 mg/L
PNEC aquatic, intermittent release: 1,5 mg/L
PNEC sediment, freshwater: 8,27 mg/kg
PNEC sediment, marine water: 0,83 mg/kg
PNEC, Soil: 1,3 mg/kg
PNEC sewage treatment plant (STP): 27,5 mg/L

butanone

INDEX No. 606-002-00-3 / EC No. 201-159-0 / CAS No. 78-93-3

PNEC aquatic, freshwater: 55,8 mg/L
PNEC aquatic, marine water: 55,8 mg/L
PNEC sediment, freshwater: 285 mg/kg
PNEC sediment, marine water: 285 mg/kg
PNEC, Soil: 22,5 mg/kg
PNEC sewage treatment plant (STP): 709 mg/L

n-butyl acetate

INDEX No. 607-025-00-1 / EC No. 204-658-1 / CAS No. 123-86-4

PNEC aquatic, freshwater: 0,18 mg/L
PNEC aquatic, marine water: 0,018 mg/L
PNEC aquatic, intermittent release: 0,36 mg/L
PNEC sediment, freshwater: 0,981 mg/kg
PNEC sediment, marine water: 0,0981 mg/kg
PNEC, Soil: 0,0903 mg/kg

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Occupational exposure controls

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (DGUV-R 112-190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Filtering device (full mask or mouthpiece) with filter: A

Hand protection

For prolonged or repeated handling the following glove material must be used: PE/EVAL/PE

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00
Print date 28.04.2016
Version 1.20

Colour Edging Pen
Revision date 18.04.2016
Issue date 18.04.2016

EN
Page 6 / 11

Eye protection

Wear closely fitting protective glasses in case of splashes.

Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state liquid
Colour refer to label
Odour Preparations containing solvent

Safety relevant basis data	Unit	Method	Remark
Flash point:	16 °C	calculated.	
Ignition temperature in °C:	n.a.		
Lower explosion limit	1,3 Vol-%	calculated.	
Upper explosion limit	14,0 Vol-%	calculated.	
Vapour pressure at 20 °C:	17,40 mbar	calculated.	
Density at 20 °C:	0,95 g/cm³	calculated.	
Vapour density; Bulk density	n.a. kg/m³		
Water solubility (g/L)	insoluble		
pH at 20 °C:	N.A.		
Viscosity at 20 °C	100 s 3 mm	EN ISO 2431	
Distribution coefficient (n-octanol / water) (log P O/W)	n.a.		
solvent content:			
Organic solvents:	73 Wt %		
Water:	0 Wt %		
Initial boiling point and boiling range	80 °C	calculated.	
Melting point/freezing point	n.a. °C		
Evaporation rate	n.a. °C		
Auto-ignition temperature:	n.a. °C		
Decomposition temperature:	n.a. °C		

9.2. Other information:

Explosive properties not explosive.

Not oxidising.

Odour threshold: not determined

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 10: Stability and reactivity

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides. Keine Entstehungsgefahr der oben angeführten Produkte bei sachgemäßem Umgang

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 7 / 11



SECTION 11: Toxicological information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

2-methoxy-1-methylethyl acetate

oral, LD50, Rat: 8532 mg/kg

dermal, LD50, Rat: > 5000 mg/kg

Based on available data the classification criteria are not met.

4-methylpentan-2-one

oral, LD50, Rat: > 2193 mg/kg

Method: OECD 401

dermal, LD50, Rat: > 2000 mg/kg

Method: OECD 402

inhalative (vapours), LC50, Rat: (4 h)

Harmful by inhalation.

Hydrocarbons, C9, aromatics

oral, LD50, Rat: 3592 mg/kg

Method: OECD 401

dermal, LD50, Rabbit: > 3160 mg/kg

Method: OECD 402

Based on available data the classification criteria are not met.

butanone

oral, LD50, Rat: > 3300 mg/kg

Method: OECD 423

dermal, LD50, Rabbit: 5000 mg/kg

Method: OECD 402

inhalative (vapours), LC50, Rat: 10000 mg/L (4 h)

Based on available data the classification criteria are not met.

n-butyl acetate

oral, LD50, Rat: 10760 mg/kg

Method: OECD 423

dermal, LD50, Rabbit: > 14112 mg/kg

Method: OECD 402

inhalative (vapours), LC50, Rat: 23,4 mg/L (4 h)

Method: OECD 403

Based on available data the classification criteria are not met.

skin corrosion/irritation; Serious eye damage/eye irritation

4-methylpentan-2-one

Eyes

Causes serious eye irritation.

butanone

Eyes, Rabbit

Method: OECD 405

Causes serious eye irritation.

Respiratory or skin sensitisation

Toxicological data are not available.

Specific target organ toxicity

4-methylpentan-2-one

Specific target organ toxicity (single exposure), Irritation:

Irritating to respiratory system.

Hydrocarbons, C9, aromatics

Specific target organ toxicity (single exposure), Irritation:

May cause respiratory irritation.

Specific target organ toxicity (single exposure), drowsiness:

May cause drowsiness or dizziness.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 8 / 11

butanone

Specific target organ toxicity (single exposure), drowsiness:
May cause drowsiness or dizziness.

n-butyl acetate

Specific target organ toxicity (single exposure), drowsiness:
May cause drowsiness or dizziness.

Aspiration hazard

Hydrocarbons, C9, aromatics

Aspiration hazard
May be fatal if swallowed and enters airways.

Practical experience/human evidence

Other observations:

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself.

SECTION 12: Ecological information

overall evaluation

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

There is no information available on the preparation itself.

Do not allow to enter into surface water or drains.

12.1. Toxicity

2-methoxy-1-methylethyl acetate

Fish toxicity, LC50, *Oncorhynchus mykiss*: 100 - 180 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, *Daphnia magna*: > 500 mg/L (48 h)
Based on available data the classification criteria are not met.

4-methylpentan-2-one

Fish toxicity, LC50: > 179 mg/L (96 h)
Method: OECD 202
Daphnia toxicity, EC50, *Daphnia magna*: > 200 mg/L (48 h)
Method: OECD 202
Bacteria toxicity, EC50, *Pseudomonas putida*: 275 mg/L (16 h)
Based on available data the classification criteria are not met.

Hydrocarbons, C9, aromatics

Fish toxicity, LC50, *Oncorhynchus mykiss*: 9,2 mg/L (96 h)
Daphnia toxicity, EC50, *Daphnia magna* (Big water flea): 3,2 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: 2,6 - 2,9 mg/L (72 h)
Based on available data the classification criteria are not met.

butanone

Fish toxicity, LC50, *Pimephales promelas* (fathead minnow): 2990 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, *Daphnia magna*: 308 mg/L (48 h)
Method: OECD 202
Algae toxicity, ErC50, *Pseudokirchneriella subcapitata*: 1972 mg/L (72 h)
Method: OECD 201
Bacteria toxicity, EC0, *Pseudomonas putida*: 1150 mg/L (16 h)
Based on available data the classification criteria are not met.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 9 / 11

n-butyl acetate

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 18 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 44 mg/L (48 h)

Algae toxicity, EC50, Desmodesmus subspicatus.: 647,7 mg/L (72 h)

Based on available data the classification criteria are not met.

Long-term Ecotoxicity

4-methylpentan-2-one

Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 30 - 35 mg/L (21 d)

Method: OECD 211

Based on available data the classification criteria are not met.

Hydrocarbons, C9, aromatics

Fish toxicity, LC50: (96 h)

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

2-methoxy-1-methylethyl acetate

Biodegradation: 100 % (8 d)

Readily biodegradable (according to OECD criteria).

4-methylpentan-2-one

Biodegradation: 83 % (28 d)

Method: OECD 301 F

Readily biodegradable (according to OECD criteria).

Hydrocarbons, C9, aromatics

Biodegradation:

Readily biodegradable (according to OECD criteria).

butanone

Biodegradation: 98 % (28 d)

Readily biodegradable (according to OECD criteria).

n-butyl acetate

Biodegradation, aerobic: 83 % (28 d)

Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

2-methoxy-1-methylethyl acetate

Distribution coefficient (n-octanol / water) (log P O/W): 0,43

Method: Log KOC

4-methylpentan-2-one

Distribution coefficient (n-octanol / water) (log P O/W): 1,38 - 1,9

Method: OECD 117

butanone

Distribution coefficient (n-octanol / water) (log P O/W): 0,3

n-butyl acetate

Distribution coefficient (n-octanol / water) (log P O/W): 2,3

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT assessment

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

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 10 / 11

List of proposed waste codes/waste designations in accordance with EWC

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

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number

UN 1263

14.2. UN proper shipping name

Land transport (ADR/RID): Paint
Sea transport (IMDG): PAINT
Air transport (ICAO-TI / IATA-DGR): Paint

14.3. Transport hazard class(es)

3

14.4. Packing group

II

14.5. Environmental hazards

Land transport (ADR/RID) n.a.
Marine pollutant n.a.

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code D/E
SPECIAL PROVISIONS 640D

Sea transport (IMDG)

EmS-No. F-E, S-E

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

not applicable

SECTION 15: Regulatory information

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

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 693,354
VOC-value (in g/L) ASTM D 2369: 693,354

according to EU-regulation 2004/42/EC (appendix II)

EU limit value for this product (cat. (Cat. B/e)): 840 g/l (2007)/840 g/l (2010).
This product contains max 693,354 g/l VOC.

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

For the following substances of this preparation a chemical safety assessment has been carried out:

EC No.	Chemical name	REACH No.
CAS No.		

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010



Article No.: 241X00 Colour Edging Pen
Print date 28.04.2016 Revision date 18.04.2016
Version 1.20 Issue date 18.04.2016

EN
Page 11 / 11

201-159-0 78-93-3	butanone	01-2119457290-43-xxxx
203-550-1 108-10-1	4-methylpentan-2-one	01-2119473980-30-xxxx
204-658-1 123-86-4	n-butyl acetate	01-2119485493-29-xxxx
203-603-9 108-65-6	2-methoxy-1-methylethyl acetate	01-2119475791-29-xxxx
918-668-5	Hydrocarbons, C9, aromatics	01-2119455851-35-xxxx

SECTION 16: Other information

Full text of classification in section 3:

Flam. Liq. 3 / H226	flammable liquids	Flammable liquid and vapour.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

Additional information

Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.