Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

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

1.1. **Product identifier**

Article No. (manufacturer/supplier)	969
Trade name/designation	BRILALIGHT Härter 2K Nachleuchtfarbe

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

1.3. **Details of the supplier of the safety data sheet**

supplier (manufacturer/importer/downstream user/distributor)
Vismara Unternehmungen CH-5000 Aarau www.farbladen.ch

Department responsible for information:
laboratory Manager
E-mail (competent person)

1.4. **Emergency telephone number**

Emergency telephone number	145 (+41 (0)44 251 51 51)

SECTION 2: Hazards identification

2.1. **Classification of the substance or mixture**

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

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

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2.2. **Label elements**

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

Hazard pictograms

Warning

Hazard statements

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P260	Do not breathe vapour.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.

P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves and eye/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use extinguishing powder or sand to extinguish.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Keep locked up.
P501	Dispose of contents/container to industrial incineration plant.

Hazard components for labelling

hexamethylene-di-isocyanate
HDI-homopolymers
Xylene
m-tolylidene diisocyanate
Aromatic polyisocyanate

Supplemental hazard information

EUH204 Contains isocyanates. May produce an allergic reaction.

Use restriction according to REACH annex XVII, no.:

Restrictions on use
As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. **Other hazards**

No information available.

SECTION 3: Composition/information on ingredients

3.2. **Mixtures**

Description polyisocyanate hardener, containing the following hazardous substances:

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

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
500-060-2 28182-81-2	01-2119488934-20 HDI-homopolymers Acute Tox. 4 H332 / Skin Sens. 1 H317 / STOT SE 3 H335	25 - 40
203-603-9 108-65-6 607-195-00-7	01-2119475791-29 2-methoxy-1-methylethyl acetate Flam. Liq. 3 H226 Substance with a common (EC) occupational exposure limit value.	25 - 40
215-535-7 1330-20-7 601-022-00-9	01-2119488216-32 Xylene Acute Tox. 4 H312 / Acute Tox. 4 H332 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / STOT SE 3 H335 / STOT RE 2 H373 / Asp. Tox. 1 H304 / Flam. Liq. 3 H226	10 - 15
500-120-8 53317-61-6	Aromatic polyisocyanate Eye Irrit. 2 H319 / Skin Sens. 1 H317	5 - 10
202-849-4 100-41-4 601-023-00-4	01-2119489370-35 ethylbenzene Flam. Liq. 2 H225 / Acute Tox. 4 H332 / STOT RE 2 H373 / Asp. Tox. 1 H304	1 - 5

205-500-4 141-78-6 607-022-00-5	01-2119475103-46 Ethyl acetate Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336 / EUH066	1 - 5
212-485-8 822-06-0 615-011-00-1	01-2119457571-37 hexamethylene-di-isocyanate Acute Tox. 3 H331 / Eye Irrit. 2 H319 / STOT SE 3 H335 / Skin Irrit. 2 H315 / Resp. Sens. 1 H334 / Skin Sens. 1 H317 Specific concentration limit (SCL): Resp. Sens. 1 H334 >= 0.5 / Skin Sens. 1 H317 >= 0.5 Acute toxicity estimate (ATE): ATE (inhalation, vapour): 0.12 mg/L	0.1 - 0.5
247-722-4 26471-62-5 615-006-00-4	01-2119454791-34 m-tolylidene diisocyanate Acute Tox. 2 H330 / Skin Irrit. 2 H315 / Eye Irrit. 2 H319 / Resp. Sens. 1 H334 / Skin Sens. 1 H317 / Carc. 2 H351 / STOT SE 3 H335 / Aquatic Chronic 3 H412 Specific concentration limit (SCL): Resp. Sens. 1 H334 >= 0.1 Acute toxicity estimate (ATE): ATE (inhalation, vapour): 0.10 mg/L	0.01 - 0.05

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
Take off immediately all contaminated clothing. 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.

Following 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**
First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

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

Unsuitable extinguishing media
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.

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 section 13). Use appropriate container to avoid environmental contamination. Fouled surfaces must be immediately cleaned with suitable solvents, Useable as such (flammable): water 45 vol.% ethanol or i-propanol 50 vol. % ammonia solution (density= 0.88) 5 vol.%
Alternative (non-flammable): sodium carbonate 5 vol.% water 95 vol.%.
Take up spilled residuals with the same agent and leave them for a few days in unclosed containers until there is no further reaction. Then, close the containers and dispose of them in accordance with the regulations for waste removal (refer to section 13).

6.4. **Reference to other sections**

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.
People who spray this preparation should have regular pulmonary function tests.

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. Be careful when opening used containers (excess pressure). Precautionary measures should be taken in order to reduce strain from humidity or water: CO2 is formed which may produce excess pressure in closed containers . 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 section 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.

Further information

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 (TRGS 727)".

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers. Keep away from amines, alcohols and water.

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

People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture.
People who spray this preparation should have regular pulmonary function tests.

8.1. **Control parameters**

Occupational exposure limit values:

2-methoxy-1-methylethyl acetate
Index No. 607-195-00-7 / EC No. 203-603-9 / CAS No. 108-65-6

WEL, TWA: 274 mg/m3; 50 ppm
WEL, STEL: 548 mg/m3; 100 ppm
Remark: (may be absorbed through the skin)

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7

WEL, TWA: 220 mg/m3; 50 ppm
WEL, STEL: 441 mg/m3; 100 ppm
Remark: (may be absorbed through the skin)

BMGV, TWA: 650 mmol/mol creatinine
Remark: methyl hippuric acid; urine; end of exposure or end of shift

ethylbenzene
Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4

WEL, TWA: 441 mg/m3; 100 ppm
WEL, STEL: 552 mg/m3; 125 ppm
Remark: (may be absorbed through the skin)

Ethyl acetate
Index No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6

WEL, TWA: 734 mg/m3; 200 ppm
WEL, STEL: 1468 mg/m3; 400 ppm

Additional information
TWA : Long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

DNEL:

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7
DNEL long-term dermal (systemic), Workers: 212 mg/kg bw/day
DNEL acute inhalative (local), Workers: 442 mg/m³
DNEL acute inhalative (systemic), Workers: 442 mg/m³
DNEL long-term inhalative (local), Workers:
DNEL long-term inhalative (systemic), Workers: 221 mg/m³
DNEL long-term oral (repeated), Consumer: 12,5 mg/kg bw/day
DNEL long-term dermal (systemic), Consumer: 125 mg/kg bw/day
DNEL acute inhalative (local), Consumer: 260 mg/m³
DNEL acute inhalative (systemic), Consumer: 260 mg/m³
DNEL long-term inhalative (local), Consumer: 65,3 mg/m³
DNEL long-term inhalative (systemic), Consumer: 65,3 mg/m³

ethylbenzene
Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4
DNEL long-term dermal (systemic), Workers: 180 mg/kg bw/day
DNEL long-term inhalative (systemic), Workers: 77 mg/m³
DNEL long-term oral (repeated), Consumer: 1,6 mg/kg bw/day
DNEL long-term inhalative (systemic), Consumer: 15 mg/m³

hexamethylene-di-isocyanate
Index No. 615-011-00-1 / EC No. 212-485-8 / CAS No. 822-06-0
DNEL acute inhalative (local), Workers: 0,07 mg/m³
DNEL long-term inhalative (systemic), Workers: 0,035 mg/m³

Ethyl acetate
Index No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6
DNEL long-term dermal (systemic), Workers: 63 mg/kg
DNEL acute inhalative (local), Workers: 1468 mg/m³
DNEL acute inhalative (systemic), Workers: 1468 mg/m³
DNEL long-term inhalative (local), Workers: 734 mg/m³
DNEL long-term inhalative (systemic), Workers: 734 mg/m³
DNEL long-term oral (repeated), Consumer: 4,5 mg/kg

DNEL long-term dermal (systemic), Consumer: 37 mg/kg bw/day
DNEL acute inhalative (local), Consumer: 734 mg/m³
DNEL acute inhalative (systemic), Consumer: 734 mg/m³
DNEL long-term inhalative (local), Consumer: 367 mg/m³
DNEL long-term inhalative (systemic), Consumer: 367 mg/m³

2-methoxy-1-methylethyl acetate
Index No. 607-195-00-7 / EC No. 203-603-9 / CAS No. 108-65-6
DNEL long-term oral (repeated), Workers: 1,67 mg/kg
DNEL long-term dermal (systemic), Workers: 54,8 mg/kg
DNEL long-term inhalative (systemic), Workers: 33 mg/m³

m-tolylidene diisocyanate
Index No. 615-006-00-4 / EC No. 247-722-4 / CAS No. 26471-62-5
DNEL acute inhalative (local), Workers: 0,14 mg/m³
DNEL acute inhalative (systemic), Workers: 0,14 mg/m³
DNEL long-term inhalative (local), Workers: 0,035 mg/m³
DNEL long-term inhalative (systemic), Workers: 0,035 mg/m³

HDI-homopolymers
EC No. 500-060-2 / CAS No. 28182-81-2
DNEL acute inhalative (local), Workers: 1 mg/m³
DNEL long-term inhalative (local), Workers: 0,5 mg/m³

PNEC:

Xylene
Index No. 601-022-00-9 / EC No. 215-535-7 / CAS No. 1330-20-7
PNEC aquatic, freshwater: 0,327 mg/L
PNEC aquatic, marine water: 0,327 mg/L
PNEC sediment, freshwater: 12,46 mg/kg
PNEC sediment, marine water: 12,46 mg/kg
PNEC sewage treatment plant (STP): 6,58 mg/L
soil: 2,31 mg/kg

ethylbenzene
Index No. 601-023-00-4 / EC No. 202-849-4 / CAS No. 100-41-4
PNEC aquatic, freshwater: 0,1 mg/L
PNEC aquatic, marine water: 0,01 mg/L
PNEC sediment, freshwater: 13,7 mg/kg
PNEC sediment, marine water: 1,37 mg/kg
PNEC, soil: 2,68 mg/kg
PNEC sewage treatment plant (STP): 9,6 mg/L

Ethyl acetate
Index No. 607-022-00-5 / EC No. 205-500-4 / CAS No. 141-78-6
PNEC aquatic, freshwater: 0,24 mg/L
PNEC aquatic, marine water: 0,024 mg/L
PNEC aquatic, intermittent release: 1,65 mg/L
PNEC sediment, freshwater: 1,15 mg/kg
PNEC sediment, marine water: 0,115 mg/kg
PNEC, soil: 0,148 mg/kg
PNEC sewage treatment plant (STP): 650 mg/L
PNEC Secondary Poisoning: 200 mg/kg food

2-methoxy-1-methylethyl acetate
Index No. 607-195-00-7 / EC No. 203-603-9 / CAS No. 108-65-6
PNEC aquatic, freshwater: 0,635 mg/cm³
PNEC aquatic, marine water: 0,0635 mg/cm³
PNEC aquatic, intermittent release: 6,35 mg/cm³
PNEC sediment, freshwater: 3,29 mg/cm³
PNEC sediment, marine water: 0,329 mg/cm³
PNEC, soil: 0,29 mg/m³
PNEC sewage treatment plant (STP): 100 mg/cm³

m-tolylidene diisocyanate
Index No. 615-006-00-4 / EC No. 247-722-4 / CAS No. 26471-62-5
PNEC aquatic, freshwater: 0,013 mg/L

PNEC aquatic, marine water: 0,0013 mg/L
PNEC, soil: > 1 mg/kg

HDI-homopolymers
EC No. 500-060-2 / CAS No. 28182-81-2
PNEC aquatic, freshwater: 0,127 mg/L
PNEC aquatic, marine water: 0,0127 mg/L
PNEC sediment, freshwater: 266700 mg/kg Sediment dry weight
PNEC sediment, marine water: 266700 mg/kg Sediment dry weight
PNEC, soil: 53182 mg/kg
PNEC sewage treatment plant (STP): 38,28 mg/L

8.2. **Exposure controls**

Provide good ventilation. This can be achieved with local or room suction. When spraying, wear self-contained breathing apparatus. For other tasks a suitable respiratory system must be used, if local and room suction is not sufficient for keeping aerosol and solvent vapour concentration below the exposure limit values. (refer to Personal protection equipment.)

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

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: > 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 EN ISO 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

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 section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

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

Physical state:	**Liquid**
Colour:	**refer to label**
Odour:	**characteristic**
Odour threshold:	**not applicable**
Melting point/freezing point:	**not applicable**
Initial boiling point and boiling range:	**139 °C** Source: Xylene
Flammability	**Flammable liquid and vapour.**
Lower and upper explosion limit	
Lower explosion limit:	**1.17 Vol-%**
Upper explosion limit:	**11.5 Vol-%** Source: Ethyl acetate
Flash point:	**25 °C** Method: DIN 53213
Auto-ignition temperature:	**333 °C** Source: 2-methoxy-1-methylethyl acetate
Decomposition temperature:	**not applicable**
pH at 20 °C:	**not applicable**

Cinematic viscosity (40°C):	**< 80 mm²/s**
Viscosity: at 20 °C:	**13 - 14 sec DIN 4 mm**
Solubility(ies):	
Water solubility at 20 °C:	**insoluble**
Partition coefficient: n-octanol/water:	**see section 12**
Vapour pressure at 20 °C:	**8 mbar** Source: Xylene
Density and/or relative density:	
Density at 20 °C:	**1.03 g/cm³**
Relative vapour density:	**not applicable**
particle characteristics:	**not applicable**

9.2. **Other information**

Solid content:	**47 weight-%**
solvent content:	
Organic solvents:	**53 weight-%**
Water:	**0 weight-%**

SECTION 10: Stability and reactivity

10.1. **Reactivity**
Reacts with water, forming carbon dioxide, producing bursting hazard in closed containers due to build-up of pressure.

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**
Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.Reacts with water, forming carbon dioxide, producing bursting hazard in closed containers due to build-up of pressure.

10.4. **Conditions to avoid**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**
not applicable

10.6. **Hazardous decomposition products**
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if inhaled.

Xylene
oral, LD50, Rat, male: 5,523 mg/kg
Method: EU Test B.1
inhalative (vapours), LC50, Rat, male: 6700 ppm (4 h)

ethylbenzene
oral, LD50, Rat: 3,5 mg/kg
dermal, LD50, Rabbit: 15,4 mg/kg

hexamethylene-di-isocyanate
oral, LD50, Rat: 746 mg/kg
Method: OECD 401
dermal, LD50, Rat: > 7000 mg/kg
Method: OECD 402
dermal, LD50, Rabbit: 570 mg/kg
inhalative (vapours), LC50, Rat: 0,124 mg/L (4 h)

Method: OECD 403
inhalative (vapours), LC50, Mouse: 1,57 mg/L

Ethyl acetate
oral, LD50, Rat: 5620 mg/kg
dermal, LD50, Rabbit: > 20000 mg/kg
oral, LD50, Rabbit: 4934
Method: OECD 401
inhalative (vapours), LC0, Rat: 29,3 (4 h)
inhalative (vapours), LCLo, Rat: > 6000 ppm (6 h)
inhalative (vapours), LD50, Rabbit, male: > 2000 mg/kg

2-methoxy-1-methylethyl acetate
dermal, LD50, Rabbit: > 2000 mg/kg

m-tolylidene diisocyanate
oral, LD50, Rat: 4130 mg/kg
dermal, LD50, Rat: > 9400 mg/kg
dermal, LD50, Rabbit: > 12,2 mg/kg
inhalative (vapours), LC50, Rat: 0,107 mg/L (4 h)
inhalative (vapours), LCLo, Rat: 4,3 mg/L (6 h)
inhalative (vapours), LD50, Mouse: > 2000 mg/kg
Method: OECD 401
(National Toxicology Program); Acute Toxicity (inhalative), Category 2 (vapour); Fatal if inhaled.

HDI-homopolymers
dermal, LD50, Rat: > 2000 mg/kg
Method: OECD 402
inhalative (vapours), LC50, Rat: 543 mg/L (4 h)
Method: OECD 403
inhalative (vapours), LC50, Rat, female: 390 mg/m³ (4 h)
Method: OECD 403

Aromatic polyisocyanate
oral, LD50, Rat: > 5000 mg/kg
inhalative (vapours), LC50, Rat: > 2,462 mg/L (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

ethylbenzene
Skin, Rabbit (24 h)
Causes mild skin irritation.
eyes, Rabbit
Causes slight eye irritation

hexamethylene-di-isocyanate
Skin (4 h)
Method: OECD 404
Corrosive
eyes
Method: OECD 405
Causes serious eye irritation.; Causes serious eye damage.

Ethyl acetate
Skin (4 h)
No skin irritation (rabbit). Degreases the skin and makes it dry and rough. Prolonged or repeated skin contact can lead to dermatitis.
eyes
Moderate eye irritation (rabbit).

2-methoxy-1-methylethyl acetate
Skin (4 h)
Method: OECD 404
Not to be classified as skin etching/irritant.
eyes
Not to be classified as severe eye damage or eye irritation.

m-tolylidene diisocyanate
Skin (4 h)
Causes skin irritation.
eyes
Risk of corneal clouding; Causes serious eye irritation.

HDI-homopolymers
Skin, Rabbit (4 h)
Method: OECD 404
mild irritant.
eyes, Rabbit
Method: OECD 405
mild irritant.

Aromatic polyisocyanate
Skin (4 h)
No data available
eyes
No data available

Respiratory or skin sensitisation

May cause an allergic skin reaction.

hexamethylene-di-isocyanate
Skin, Guinea pig: ; Evaluation positive
Method: OECD 406
Respiratory system, Guinea pig: ; Evaluation positive
Method: OECD 406

Ethyl acetate
Skin, Guinea pig: ; Evaluation not sensitising.
Method: OECD 406
Maximization test

2-methoxy-1-methylethyl acetate
Skin: ; Evaluation not sensitising.
Method: OECD 406
Respiratory system:
No data available

m-tolylidene diisocyanate
Skin, Guinea pig: ; Evaluation positive
May cause an allergic skin reaction.; (IUCLID)
Respiratory system:
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

HDI-homopolymers
Skin, Guinea pig: ; Evaluation sensitising
Method: OECD 406
Magnuson/Klingmann test
Respiratory system, Guinea pig: ; Evaluation sensitising
Method: OECD 406
Magnuson/Klingmann test

Aromatic polyisocyanate
Skin:
No data available
Respiratory system:
No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

ethylbenzene
Germ cell mutagenicity; Evaluation negative
Hamster; Mouse; ovaries
Carcinogenicity; Evaluation Carc. Cat. 2
Method: Group II B (IARC): Possible carcinogenic to humans (ethylbenzene)
human

hexamethylene-di-isocyanate
Germ cell mutagenicity
Mutagenicity (mammalian cell test): chromosome aberration. Ovarian cells of Chinese hamster Result: negative
Carcinogenicity
Showed no carcinogenic effect in animal experiments.
Reproductive toxicity
No effect on fertility in animal studies.
Genotoxicity in vivo; Evaluation negative
Method: OECD 474
Mouse; Inhalation; bone marrow
Genotoxicity in vitro; Evaluation negative
Method: Ames test
Salmonella typhimurium
teratogenicity
Did not show any fruit-damaging effect in animal experiments.

Ethyl acetate
Germ cell mutagenicity; Evaluation In vitro tests showed no mutagenic effects.
Carcinogenicity; Evaluation Didn't show any carcinogenic effects in animal tests.
Reproductive toxicity; Evaluation No reproductive toxicity
Genotoxicity in vitro; Evaluation negative
(Chromosome aberration test in vitro; CHO (Chinese hamster ovaries) cells; with and without metabolic activation) (OECD Test Guideline 473).; (Back mutation test on bacteria; Salmonella typhimurium) (OECD test guideline 471).
Genotoxicity in vivo; Evaluation negative
Method: OECD 474
(Chromosome aberration test in vivo; Chinese hamster, male and female) (Oral).

2-methoxy-1-methylethyl acetate
Germ cell mutagenicity
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available
Lactation
No data available

m-tolylidene diisocyanate
Germ cell mutagenicity; Evaluation negative
Genotoxicity in vivo; Mutagenicity (mammalian cell test): Micronucleus.; (National Toxicology Program)
Carcinogenicity
Suspected of causing cancer.
Reproductive toxicity
No data available
Lactation
No data available
Genotoxicity in vitro; Evaluation positive
Ames Test; Salmonella typhimurium; (National Toxicology Program)

HDI-homopolymers
Germ cell mutagenicity
The product showed no mutagenic properties in bacteria and mammalian cell cultures.
Carcinogenicity
No data available
Reproductive toxicity
No data available

Aromatic polyisocyanate
Germ cell mutagenicity
No data available
Carcinogenicity
No data available
Reproductive toxicity
No data available

STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Xylene
Specific target organ toxicity (repeated exposure)
Liver and kidney damage; central nervous system
Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Liver and kidney damage; central nervous system; hearing organs

ethylbenzene
Repeated dose toxicity, Rat: 75 mg/kg
Method: OECD 407
RTECS-no.:; DA0700000
Depression of central nervous system
movement disorders; headache; Vomiting

hexamethylene-di-isocyanate
Specific target organ toxicity (single exposure)
May cause respiratory irritation.; Target organs: Respiratory system
Specific target organ toxicity (repeated exposure)
No data available

Ethyl acetate
Specific target organ toxicity (single exposure)
Inhalation; central nervous system; May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)
No data available
Repeated dose toxicity: 900 mg/kg
Method: NOAEL
Repeated dose toxicity, Rat: 3600 mg/kg (92 d)
Method: LOAEL
oral
Repeated dose toxicity, Rat: 350 ppm (94 d)
Method: NOEC
inhalative (vapours); 5 days/week
Repeated dose toxicity, Rat: 350 ppm (94 d)
Method: LOEC:
inhalative (vapours); 5 days/week

2-methoxy-1-methylethyl acetate
Specific target organ toxicity (single exposure)
No data available
Specific target organ toxicity (repeated exposure)
No data available

m-tolylidene diisocyanate
Specific target organ toxicity (single exposure)
May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)
No data available

HDI-homopolymers
Specific target organ toxicity (single exposure) Evaluation May cause respiratory irritation.
Specific target organ toxicity (repeated exposure) Evaluation After repeated recording, the local irritant effect is in the foreground.

Aromatic polyisocyanate
Specific target organ toxicity (single exposure)
No data available
Specific target organ toxicity (repeated exposure)
No data available

Aspiration hazard

Ethyl acetate

Aspiration hazard
no classification

2-methoxy-1-methylethyl acetate
Aspiration hazard
Not to be classified as aspirational.

m-tolylidene diisocyanate
Aspiration hazard
No data available

HDI-homopolymers
Aspiration hazard; Evaluation No danger of aspiration to be assumed.

Aromatic polyisocyanate
Aspiration hazard
No data available

Practical experience/human evidence

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. Because of the isocyanate components' properties of this and with consideration of similar preparations the following applies: This mixture may cause acute irrtation and/or sensitization of airways which lead to tightness in thorax, short-breath and asthmatic complaints. After sensitization even concentrations below the exposure limit values may cause asthma. Repeated inhaling can lead to permanent illness of the respiratory tract.

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.

11.2. **Information on other hazards**

Endocrine disrupting properties
No information available.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
Do not allow to enter into surface water or drains.

12.1. **Toxicity**

Xylene
Fish toxicity, LC50, fish: 2,6 mg/L (96 h)
Method: OECD 203
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4,6 mg/L (72 h)
Method: OECD 201
Algae toxicity, EC50, Pseudokirchneriella subcapitata: 4,6 mg/L (72 h)
Method: OECD 201
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout) (96 h)
Method: OECD 203
Daphnia toxicity, IC50, Daphnia magna: 1 mg/L (24 h)
Method: OECD 202
Algae toxicity, EC50, Selenastrum capricornutum: 2,2 mg/L (73 h)
Method: OECD 201
Daphnia toxicity, growth test (Eb-Cx) 10%“ , Daphnia magna: 1,91 mg/L (21 d)
Method: OECD 211
Bacteria toxicity, NOEC, Activated sludge: 16 mg/L (28 t)
Method: OECD 301 F

ethylbenzene
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 4,2 mg/L (96 h)
Daphnia toxicity, EC50, Daphnia magna (Big water flea) 1,8 - 2,4 mg/L (48 h)
Algae toxicity, EC50, Skeletonema costatum: 4,9 mg/L (72 h)
Algae toxicity, EC50, Pseudokirchneriella subcapitata: 7,2 mg/L (48 h)
Shellfish Toxicity, LC50, Mysidopsis bahia: > 5,2 mg/L (48 h)
Toxicity of Microoganisms, EC50, microorganisms: 96 mg/L (24 h)

hexamethylene-di-isocyanate
Fish toxicity, LC50, Danio rerio (zebrafish): 22 mg/L (96 h)
Algae toxicity, ErC50, Desmodesmus subspicatus: > 77,4 mg/L (72 h)
Method: OECD 201
accompanying analysis: yes
growth inhibition, NOEC, Desmodesmus subspicatus: 11,7 mg/L (72 h)
Method: OECD 201
accompanying analysis: yes
Bacteria toxicity, EC0, Pseudomonas putida: 100 mg/L (24 h)
(IUCLID)
respiratory inhibition, EC50, Activated sludge: 842 mg/L (3 h)
Method: OECD 209

Ethyl acetate
Fish toxicity, LC50, Pimephales promelas (fathead minnow): 230 mg/L (96 h)
Flow test; US-EPA
Daphnia toxicity, EC50, Daphnia magna: 610 mg/L (48 h)
Daphnia toxicity, EC50, Daphnia cucullata (Helmet water flea): 165 mg/L (48 h)
Algae toxicity, EC50, Desmodesmus subspicatus: 5600 mg/L (48 h)
Method: DIN 38412
Static test; end; Rate of growth
Algae toxicity, NOEC, Desmodesmus subspicatus: > 100 mg/L (72 h)
Method: OECD 201
Static test; end; Rate of growth
Bacteria toxicity, EC10, Photobacterium phosphoreum: 1650 mg/L (15 min.)
Static test; end; Rate of growth
Bacteria toxicity, EC50, Photobacterium phosphoreum: 5870 mg/L (15 min.)
Static test; end; Rate of growth

m-tolylidene diisocyanate
Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 133 mg/L (96 h)
Method: OECD 203
(IUCLID)
Daphnia toxicity, EC50, Daphnia magna (Big water flea): 12,5 mg/L (48 h)
Method: OECD 202
Bacteria toxicity, EC50, Activated sludge: > 100 mg/L (3 h)
Method: OECD 209

HDI-homopolymers
Fish toxicity, LC50, Danio rerio (zebrafish): > 100 mg/L (96 h)
Method: OECD 203
Daphnia toxicity, EC50, Daphnia magna: > 100 mg/L (48 h)
Method: OECD 202
Algae toxicity, IC50, Scenedesmus subspicatus: > 100 mg/L (72 h)
Method: OECD 201
Bacteria toxicity, EC50, Activated sludge: 1000 mg/L (3 h)
Method: OECD 209

Long-term Ecotoxicity

Xylene
Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 4,36 mg/L (73 h)
Method: OECD 201
Fish toxicity, NOEC, fish: > 1,3 mg/L (56 d)
Daphnia toxicity, NOEC, Daphnia pulex (water flea): 1,17 mg/L (7 d)
Method: US EPA 600/4-91-003
Daphnia toxicity, EL50, Daphnia magna: 2,9 mg/L (21 d)
Method: OECD 211
Algae toxicity, EC50, Pseudokirchneriella subcapitata: 2,2 mg/L (73 h)
Method: OECD 201
Daphnia toxicity, LOEC:, Daphnia magna (Big water flea): 3,16 mg/L (21 d)
Method: OECD 211
Algae toxicity, growth test (Eb-Cx) 10%“ , Pseudokirchneriella subcapitata: 0,72 mg/L (73 h)
Method: OECD 201

ethylbenzene
Daphnia toxicity, NOEC, Ceriodaphnia dubia (Wasserfloh): 0,96 mg/L (7 d)
Daphnia toxicity, LC50, Ceriodaphnia dubia (Wasserfloh): 3,6 mg/L (7 d)
Bacteria toxicity, EC50, Nitrosomonas sp: 96 mg/L (24 h)
Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 3,4 mg/L (96 h)
Daphnia toxicity, LOEC:, Ceriodaphnia dubia (Wasserfloh): 1,7 mg/L (7 d)

Ethyl acetate
Fish toxicity, NOEC, Pimephales promelas (fathead minnow): > 9,65 mg/L (32 d)
Method: OECD 211
semistatic

12.2. **Persistence and degradability**

Xylene
Persistence and degradability:
Method: Rapid photochemical oxidation in air
Biodegradation: 98 percent (28 d)
Readily biodegradable (according to OECD criteria)

ethylbenzene
Biodegradation, aerobic: 70 - 80 percent (28 d); Evaluation Readily biodegradable (according to OECD criteria)

hexamethylene-di-isocyanate
Biodegradation: < 0,0001 percent (28 d); Evaluation Poorly eliminated from water.
Method: OECD 302C

Ethyl acetate
Persistence and degradability: Evaluation The product evaporates easily from the water surface.
Biodegradation: 79 percent (20 d); Evaluation Readily biodegradable (according to OECD criteria).
Method: OECD 301D
Related to: Biochemical oxygen demand

2-methoxy-1-methylethyl acetate
Persistence and degradability:
No data available
Biodegradation: Evaluation Readily biodegradable (according to OECD criteria).

m-tolylidene diisocyanate
Biodegradation: 9 percent (28 d)
Method: OECD 302C
Poorly eliminated from water.

HDI-homopolymers
Biodegradation: Evaluation Not readily biodegradable (according to OECD criteria)
Method: OECD 301C

Aromatic polyisocyanate
Biodegradation:
No data available

12.3. **Bioaccumulative potential**

Xylene
Distribution coefficient n-octanol/water (log KOW): 3,49

ethylbenzene
Distribution coefficient n-octanol/water (log KOW): 3,6

Ethyl acetate
Partition coefficient: n-octanol/water:
Distribution coefficient n-octanol/water (log KOW): 0,68 ; Evaluation Bioaccumulation is not to be expected.

2-methoxy-1-methylethyl acetate
Distribution coefficient n-octanol/water (log KOW): 1,2

m-tolylidene diisocyanate
Distribution coefficient n-octanol/water (log KOW):
No data available

HDI-homopolymers
Distribution coefficient n-octanol/water (log KOW):
No data available

Aromatic polyisocyanate
Distribution coefficient n-octanol/water (log KOW):
No data available

Bioconcentration factor (BCF)

Ethyl acetate
Bioconcentration factor (BCF): 30

12.4. **Mobility in soil**

Xylene
soil: Evaluation Absorbs slowly into the soil
Water: Evaluation Floats on the water

Ethyl acetate
Water: Evaluation Swims on water and does not dissolve.
Air: Evaluation Slightly volatile, quickly distributed in the air.

m-tolylidene diisocyanate
soil:
No data available

HDI-homopolymers
soil:
No data available

Aromatic polyisocyanate
soil:
No data available

12.5. **Results of PBT and vPvB assessment**

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

12.6. **Endocrine disrupting properties**
No information available.

12.7. **Other adverse effects**
No information available.

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

Appropriate disposal / Product
Recommendation
Do not allow to enter into surface water or drains. Handle contaminated packages in the same way as the substance itself.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
*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package
Recommendation
Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. **UN number or ID 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**

III

14.5. **Environmental hazards**

Land transport (ADR/RID)	not applicable
Marine pollutant	not applicable

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

Further information

Land transport (ADR/RID)

Tunnel restriction code	D/E

Sea transport (IMDG)

EmS-No.	F-E, S-E

14.7. **Maritime transport in bulk according to IMO instruments**

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]
VOC-value (in g/L): 546

Use restriction according to REACH annex XVII, no.:
Restrictions on use
As from 24 August 2023 adequate training is required before industrial or professional use.

National regulations

Restrictions of occupation
Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

15.2. **Chemical Safety Assessment**
For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
500-060-2 28182-81-2	HDI-homopolymers	01-2119488934-20
203-603-9 108-65-6	2-methoxy-1-methylethyl acetate	01-2119475791-29
215-535-7 1330-20-7	Xylene	01-2119488216-32
202-849-4 100-41-4	ethylbenzene	01-2119489370-35
205-500-4 141-78-6	Ethyl acetate	01-2119475103-46
212-485-8 822-06-0	hexamethylene-di-isocyanate	01-2119457571-37
247-722-4 26471-62-5	m-tolylidene diisocyanate	01-2119454791-34

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H332	Acute toxicity (inhalative)	Harmful if inhaled.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Acute Tox. 4 / H312	Acute toxicity (dermal)	Harmful in contact with skin.

Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
STOT SE 3 / H336	STOT-single exposure	May cause drowsiness or dizziness.
Acute Tox. 3 / H331	Acute toxicity (inhalative)	Toxic if inhaled.
Resp. Sens. 1 / H334	Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Acute Tox. 2 / H330	Acute toxicity (inhalative)	Fatal if inhaled.
Carc. 2 / H351	Carcinogenicity	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Chronic 3 / H412	Hazardous to the aquatic environment	Harmful to aquatic life with long lasting effects.

Classification procedure

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

Flam. Liq. 3	Flammable liquids	On basis of test data.
Acute Tox. 4	Acute toxicity (inhalative)	Calculation method.
Skin Irrit. 2	Skin corrosion/irritation	Calculation method.
Eye Irrit. 2	Serious eye damage/eye irritation	Calculation method.
Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
STOT SE 3	STOT-single exposure	Calculation method.
STOT RE 2	STOT-repeated exposure	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Further information

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