

# Safety Data Sheet

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

Article No.: 114XXX010B  
Print date 05.11.2018  
Version 1.0

RETOUCHING VARNISH  
Revision date 05.11.2018  
Issue date 05.11.2018

EN  
Page 1 / 8

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifiers

Article No. (manufacturer/supplier): 114XXX010B  
Identification of the substance or mixture RETOUCHING VARNISH

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

#### Relevant identified uses:

Artists supply and hobby preparations  
Coatings and paints, thinners, paint removers

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

#### Supplier (manufacturer/importer/downstream user/distributor):

Daler-Rowney Ltd  
Peacock Lane  
Bracknell, RG12 8SS  
ENGLAND  
Telephone: +44 (0) 1344 461083  
Telefax: +44 (0) 1344 486511

#### Dept. responsible for information:

E-mail Philip.Gray@daler-rowney.com

### 1.4. Emergency telephone number

Emergency telephone: +44 (0) 1344 461000

## 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. 3 / H226	flammable liquids	Flammable liquid and vapour.
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

The product is classified and labelled according to EC directives or corresponding national laws.

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

##### Hazard pictograms



Warning

##### Hazard statements

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H412 Harmful to aquatic life with long lasting effects.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
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.  
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.

# Safety Data Sheet

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

Article No.: 114XXX010B RETOUCHING VARNISH  
Print date 05.11.2018 Revision date 05.11.2018 EN  
Version 1.0 Issue date 05.11.2018 Page 2 / 8

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local legislation.

**contains:**

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

**Supplemental Hazard information (EU)**

EUH066 Repeated exposure may cause skin dryness or cracking.

**2.3. Other hazards**

Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later.

### 3. Composition / Information on ingredients

**3.2. Mixtures**

**Product description / chemical characterization**

**Description** Painting Medium for Oil-Colour

**Hazardous ingredients**

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

EC No.	REACH No.	Wt %
CAS No.	Chemical name	Remark
INDEX No.	classification:	
919-857-5	01-2119463258-33	
64742-48-9	Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics	50 - 100
649-327-00-6	Flam. Liq. 3 H226 / Asp. Tox. 1 H304 / STOT SE 3 H336	
203-539-1		
107-98-2	1-methoxy-2-propanol	5 - 10
603-064-00-3	Flam. Liq. 3 H226 / STOT SE 3 H336	
918-668-5	01-2119455851-35-xxxx	
649-356-00-4	Hydrocarbons, C9, aromatics	2,5 - 5
	STOT SE 3 H335 / STOT SE 3 H336 / Asp. Tox. 1 H304 / Aquatic Chronic 2 H411 / Flam. Liq. 3 H226	

**Additional information**

Full text of classification: see section 16

**Labelling for contents according to regulation (EC) No. 648/2004:**

5 - 15 % Hydrocarbons, C9, aromatics

### 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.

# Safety Data Sheet

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

Article No.: 114XXX010B  
Print date 05.11.2018  
Version 1.0

RETOUCHING VARNISH  
Revision date 05.11.2018  
Issue date 05.11.2018

EN  
Page 3 / 8

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

### 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. Vapours form explosive mixtures with air.

#### 5.3. Advice for firefighters

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

### 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. Vapours form explosive mixtures with air.

#### 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).

#### 6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

### 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.: 114XXX010B RETOUCHING VARNISH  
Print date 05.11.2018 Revision date 05.11.2018  
Version 1.0 Issue date 05.11.2018

EN  
Page 4 / 8

## 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/m<sup>3</sup>; 100 ppm

STEL: 560 mg/m<sup>3</sup>; 150 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/m<sup>3</sup>

DNEL long-term inhalative (systemic), Workers: 369 mg/m<sup>3</sup>

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

DNEL long-term inhalative (systemic), Consumer: 43,9 mg/m<sup>3</sup>

Hydrocarbons, C9, aromatics

INDEX No. 649-356-00-4 / EC No. 918-668-5

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

DNEL long-term inhalative (systemic), Workers: 150 mg/m<sup>3</sup>

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

DNEL long-term dermal (local), Consumer: 11 mg/kg

DNEL acute inhalative (local), Consumer: 32 mg/m<sup>3</sup>

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

INDEX No. 649-327-00-6 / EC No. 919-857-5 / CAS No. 64742-48-9

DNEL long-term dermal (systemic), Workers: 208 mg/kg bw/day

DNEL long-term inhalative (systemic), Workers: 871 mg/m<sup>3</sup>

DNEL long-term oral (repeated), Consumer: 125 mg/kg bw/day

DNEL long-term dermal (systemic), Consumer: 125 mg/kg bw/day

DNEL acute inhalative (systemic), Consumer: 900 mg/m<sup>3</sup>

DNEL long-term inhalative (systemic), Consumer: 185 mg/m<sup>3</sup>

#### 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 aquatic, marine water: 1 mg/L

PNEC sediment, freshwater: 41,6 mg/kg

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

PNEC sewage treatment plant (STP): 100 mg/L

### 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 (BGR 190). 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 (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

# Safety Data Sheet

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

Article No.: 114XXX010B RETOUCHING VARNISH  
Print date 05.11.2018 Revision date 05.11.2018  
Version 1.0 Issue date 05.11.2018

EN  
Page 5 / 8

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.

## 9. Physical and chemical properties

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

**Appearance:** liquid  
**Physical state** liquid  
**Colour** refer to label  
**Odour** characteristic

Safety relevant basis data	Unit	Method	Remark
Flash point:	< 45 °C	DIN 53213	
Ignition temperature in °C:	237 °C		
Lower explosion limit	0,7 Vol-%		
Upper explosion limit	12,0 Vol-%		
Vapour pressure at 20 °C:	2,62 mbar		
Density at 20 °C:	1,00 g/cm <sup>3</sup>		
Water solubility (g/L)	partially soluble		
pH at 20 °C:	-		
Viscosity at 20 °C	< 50 mPa·s		
Solvent separation test (%)	< 3 %		
boiling point in °C at 101,3 kPa	120 °C		

### 9.2. Other information:

## 10. Stability and reactivity

### 10.1. Reactivity

### 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. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. Vapours form explosive mixtures with air.

### 10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

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

## 11. Toxicological information

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

No data on preparation itself available.

### 11.1. Information on toxicological effects

#### Acute toxicity

1-methoxy-2-propanol

oral, LD50, Rat: 4016 mg/kg

dermal, LD50, Rabbit: 2000 mg/kg

Hydrocarbons, C9, aromatics

# Safety Data Sheet

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

Article No.: 114XXX010B RETOUCHING VARNISH  
Print date 05.11.2018 Revision date 05.11.2018  
Version 1.0 Issue date 05.11.2018

EN  
Page 6 / 8

oral, LD50, Rat: 3592 mg/kg  
dermal, LD50, Rat: > 3160 mg/kg  
inhalative (vapours), LC50, Rat: > 10,2 mg/L (4 h)  
Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics  
oral, LD50, Rat: > 5000 mg/kg  
dermal, LD50, Rabbit: > 5000 mg/kg  
Method: OECD 402  
inhalative (vapours), LC50, Rat: > 5 mg/L (4 h)

#### skin corrosion/irritation; Serious eye damage/eye irritation

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics  
Skin (4 h)  
mild irritant.; Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

#### 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 .

## 12. Ecological information

#### overall evaluation

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

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

#### 12.1. Toxicity

1-methoxy-2-propanol

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

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 23300 mg/L (48 h)

Hydrocarbons, C9, aromatics

Fish toxicity, LC50, fish: 1 - 10 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 3,2 mg/L (48 h)

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Fish toxicity, LC50, Oncorhynchus mykiss: > 100 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Daphnia magna (Big water flea): > 1000 mg/L (48 h)

Method: OECD 202

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: > 1000 mg/L (72 h)

Method: OECD 201

#### Long-term Ecotoxicity

Hydrocarbons, C9, aromatics

Fish toxicity, LC50, Oncorhynchus mykiss: 9,2 mg/L (96 h)

Fish toxicity, NOEC, Oncorhynchus mykiss: 1,23 mg/L (28 d)

Algae toxicity, NOEC, Daphnia magna (Big water flea): 2,14 mg/L (21 d)

# Safety Data Sheet

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

Article No.: 114XXX010B RETOUCHING VARNISH  
Print date 05.11.2018 Revision date 05.11.2018  
Version 1.0 Issue date 05.11.2018

EN  
Page 7 / 8

## 12.2. Persistence and degradability

Hydrocarbons, C9, aromatics

:

Photo-chemical elimination

Hydrocarbons, C9-11, n-alkanes, isoalkanes, cyclics, <2% aromatics

:

Photo-chemical elimination; The substance is not soluble in water.; Readily biodegradable (according to OECD criteria)

## 12.3. Bioaccumulative potential

1-methoxy-2-propanol

Distribution coefficient (n-octanol / water) (log P O/W): -0,44

Method: Log KOC

Hydrocarbons, C9, aromatics

Distribution coefficient (n-octanol / water) (log P O/W): 3,7 - 6,7

## 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

## 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. Send to a collecting point for used paints.

## 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

III

### 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.: 114XXX010B  
Print date 05.11.2018  
Version 1.0

RETOUCHING VARNISH  
Revision date 05.11.2018  
Issue date 05.11.2018

EN  
Page 8 / 8

tunnel restriction code D/E

## 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: 592

VOC-value (in g/L) ASTM D 2369: 592

### 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.

## 16. Other information

### Full text of classification in section 3:

Flam. Liq. 3 / H226	flammable liquids	Flammable liquid and vapour.
Asp. Tox. 1 / H304	Aspiration hazard	May be fatal if swallowed and enters airways.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

### Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

### Additional 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 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.