



## SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

#### 1.1 Product identifier

**Product name:** TITAN EM 1540 MTU

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

**Identified uses:** Lubricant

**Uses advised against:** No uses advised against identified.

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

**Manufacturer / Supplier**

Fuchs Schmierstoffe GmbH  
Friesenheimer Str. 19  
68169 Mannheim

Telephone:

+49 621 3701-0 (ZENTRALE)

Fax:

+49 621 3701-570

**Contact Person:**

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Telephone:

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produktsicherheit@fuchs-schmierstoffe.de

#### 1.4 Emergency telephone number:

+49 621 3701-1333 ODER +49 621 3701-0

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

|| The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

**Classification according to Directive 67/548/EEC or 1999/45/EC as amended.**

R52/53

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

**Product name:** TITAN EM 1540 MTU

**Classification according to Regulation (EC) No 1272/2008 as amended.**

**Health Hazards**

Serious eye irritation                      Category 2                      H319: Causes serious eye irritation.

**Environmental Hazards**

Chronic hazards to the aquatic environment                      Category 3                      H412: Harmful to aquatic life with long lasting effects.

**Hazard summary**

**Physical Hazards:**                      No data available.

**2.2 Label Elements**



**Signal Words:**                      Warning

**Hazard Statement(s):**                      H319: Causes serious eye irritation.  
H412: Harmful to aquatic life with long lasting effects.

**Precautionary Statement**

**Prevention:**                      P262: Do not get in eyes, on skin, or on clothing.  
P273: Avoid release to the environment.

**Supplemental label information**

EUH208: Contains Calcium sulfonate. May produce an allergic reaction.

**2.3 Other hazards:**                      By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept. The product may not be released into the environment without control.

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

**General information:**                      Mixture containing severely refined base oils and additives.

Chemical name	Concentration *	Identifier	REACH Registration No.	Notes
Polyolefin amide alkenamide	1,00 - <5,00%	Polymer		
Ca phenate	1,00 - <5,00%	291-829-9	01-2119524004-56	

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ZnDTP	1,00 - <2,50%	272-028-3	01-2119657973-23	
Calcium sulfonate	0,10 - <1,00%	271-877-7		
Branched alkyl phenol and Ca branched alkyl phenol	0,10 - <0,25%	Polymer		
Phenol derivative	0,10 - <0,30%	310-154-3		

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

## Classification

Chemical name	Classification	
Polyolefin amide alkenamide	DSD:	R53
	CLP:	Aquatic Chronic 4;H413
Ca phenate	DSD:	R53
	CLP:	Aquatic Chronic 4;H413
ZnDTP	DSD:	Xi; R41 N; R51/53
	CLP:	Eye Dam. 1;H318, Aquatic Chronic 2;H411
Calcium sulfonate	DSD:	Xi; R43 R53
	CLP:	Skin Sens. 1;H317, Aquatic Chronic 4;H413
Branched alkyl phenol and Ca branched alkyl phenol	DSD:	T; R60 Xi; R36/38 N; R50/53
	CLP:	Repr. 1B;H360, Aquatic Chronic 1;H410, Skin Irrit. 2;H315, Eye Irrit. 2;H319
Phenol derivative	DSD:	T; R60
	CLP:	Repr. 1B;H360

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

The full text for all R-phrases and H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General:** Change clothes and shoes contaminated or soaked by the product. Never put rags contaminated by the product into cloth-pockets.

### 4.1 Description of first aid measures

**Inhalation:** Supply fresh air; consult doctor in case of symptoms.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Skin Contact:** Wash with soap and water. The product is not skin irritating.

**Ingestion:** Rinse mouth thoroughly.

**4.2 Most important symptoms and effects, both acute and delayed:** Causes serious eye irritation.

**Product name:** TITAN EM 1540 MTU

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

**Hazards:** No data available.

**Treatment:** Get medical attention if symptoms occur.

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

**Suitable extinguishing media:** CO<sub>2</sub>, fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable tensides added

**Unsuitable extinguishing media:** Water with a full water jet.

**5.2 Special hazards arising from the substance or mixture:** During fire, gases hazardous to health may be formed.

#### **5.3 Advice for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### **SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures:** In case of spills, beware of slippery floors and surfaces.

**6.2 Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Prevent from spreading (e.g. by binding or oil barriers).

**6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust).

**6.4 Reference to other sections:** See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

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## SECTION 7: Handling and storage:

- 7.1 Precautions for safe handling:** Avoid contact with eyes. Wash hands thoroughly after handling. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products.
- 7.2 Conditions for safe storage, including any incompatibilities:** Local regulations concerning handling and storage of waterpolluting products have to be followed. Prevent formation of aerosols. Do not heat up to temperatures close to the flash point.
- 7.3 Specific end use(s):** not applicable

**Storage Class:** 10, Combustible liquids

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

#### Occupational Exposure Limits

None of the components have assigned exposure limits.

### 8.2 Exposure controls

**Appropriate engineering controls:** No data available.

#### Individual protection measures, such as personal protective equipment

**General information:** Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

**Eye/face protection:** Safety glasses (EN 166) recommended during refilling.

#### Skin protection

**Hand Protection:** Nitrile butyl rubber (NBR). Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Other:** Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor. Avoid breathing vapour/ aerosol.

**Thermal hazards:** No data available.



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**Hygiene measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

**Environmental Controls:** No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Brown
<b>Odor:</b>	Characteristic
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	not applicable
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	not applicable
<b>Flash Point:</b>	230 °C
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability Limit - Upper (%)—:</b>	No data available.
<b>Flammability Limit - Lower (%)—:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density (air=1):</b>	No data available.
<b>Density:</b>	0,88 g/ml (15,00 °C)

#### Solubility(ies)

<b>Solubility in Water:</b>	Insoluble in water
<b>Solubility (other):</b>	No data available.

**Partition coefficient (n-octanol/water):** No data available.

**Autoignition Temperature:** No data available.

**Decomposition Temperature:** No data available.

**Kinematic viscosity:** 104 mm<sup>2</sup>/s (40 °C)

**Explosive properties:** No data available.

**Oxidizing properties:** No data available.

**9.2 Other information** No data available.

## SECTION 10: Stability and reactivity

**10.1 Reactivity:** Stable under normal temperature conditions and recommended use.

**10.2 Chemical Stability:** No data available.

**Product name:** TITAN EM 1540 MTU

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- 10.3 Possibility of Hazardous Reactions:** None under normal conditions.
- 10.4 Conditions to Avoid:** Avoid heat or contamination.
- 10.5 Incompatible Materials:** Strong oxidizing substances. Strong acids. Strong bases.
- 10.6 Hazardous Decomposition Products:** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## SECTION 11: Toxicological information

### Information on likely routes of exposure

- Inhalation:** No data available.
- Ingestion:** No data available.
- Skin Contact:** No data available.
- Eye contact:** Causes eye irritation.

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Oral

- Product:** Not classified for acute toxicity based on available data.
- Specified substance(s)**
- |  |                            |
|--|----------------------------|
| Polyolefin amide                                   | No data available.         |
| alkenamide   |                            |
| Ca phenate   | No data available.         |
| ZnDTP  | LD 50 (Rat): > 2.001 mg/kg |
| Calcium sulfonate                                  | No data available.         |
| Branched alkyl phenol and Ca branched alkyl phenol | No data available.         |
| Phenol derivative                                  | No data available.         |

##### Dermal

- Product:** Not classified for acute toxicity based on available data.

**Product name:** TITAN EM 1540 MTU

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**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	LD 50 (Rat): > 2.001 mg/kg
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Inhalation**

**Product:**

Not classified for acute toxicity based on available data.

**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Repeated dose toxicity**

**Product:**

No data available.

**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Skin Corrosion/Irritation:**

**Product:**

No data available.



**Product name:** TITAN EM 1540 MTU

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**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Serious Eye Damage/Eye Irritation:**

**Product:** No data available.

**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Respiratory or Skin Sensitization:**

**Product:** No data available.

**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

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### **Germ Cell Mutagenicity**

#### **In vitro**

**Product:** No data available.

#### **Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol	No data available.
and Ca branched alkyl phenol	
Phenol derivative	No data available.

#### **In vivo**

**Product:** No data available.

#### **Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol	No data available.
and Ca branched alkyl phenol	
Phenol derivative	No data available.

### **Carcinogenicity**

**Product:** No data available.

#### **Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol	No data available.
and Ca branched alkyl phenol	
Phenol derivative	No data available.

### **Reproductive toxicity**

**Product:** No data available.

**Product name:** TITAN EM 1540 MTU

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**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Aspiration Hazard**

**Product:** No data available.

**Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Product name:** TITAN EM 1540 MTU

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**Other Adverse Effects:** No data available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Acute toxicity

##### Fish

**Product:** No data available.

##### Specified substance(s)

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

##### Aquatic Invertebrates

**Product:** No data available.

##### Specified substance(s)

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

#### Chronic Toxicity

##### Fish

**Product:** No data available.

##### Specified substance(s)

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**Product name:** TITAN EM 1540 MTU

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#### **Aquatic Invertebrates**

**Product:** No data available.

#### **Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol	No data available.
and Ca branched alkyl	
phenol	
Phenol derivative	No data available.

#### **Toxicity to Aquatic Plants**

**Product:** No data available.

#### **Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol	No data available.
and Ca branched alkyl	
phenol	
Phenol derivative	No data available.

### **12.2 Persistence and Degradability**

#### **Biodegradation**

**Product:** No data available.

#### **Specified substance(s)**

Polyolefin amide	No data available.
alkenamide	
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol	No data available.
and Ca branched alkyl	
phenol	
Phenol derivative	No data available.

### **12.3 Bioaccumulative Potential**

**Product:** No data available.

#### **Specified substance(s)**

**Product name:** TITAN EM 1540 MTU

Polyolefin amide alkenamide	No data available.
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**12.4 Mobility in Soil:** No data available.

**Known or predicted distribution to environmental compartments**

Polyolefin amide alkenamide	No data available.
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**12.5 Results of PBT and vPvB  
assessment:** No data available.

Polyolefin amide alkenamide	No data available.
Ca phenate	No data available.
ZnDTP	No data available.
Calcium sulfonate	No data available.
Branched alkyl phenol and Ca branched alkyl phenol	No data available.
Phenol derivative	No data available.

**12.6 Other Adverse Effects:** Harmful to aquatic life with long lasting effects.

**Water Hazard Class  
(WGK):** WGK 2: water-endangering.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**General information:** Dispose in accordance with all applicable regulations.

**Disposal methods:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**European Waste Codes**

13 02 05\*: mineral-based non-chlorinated engine, gear and lubricating oils

Product name: TITAN EM 1540 MTU

## SECTION 14: Transport information

### ADR/RID

- 14.1 UN Number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
  - Class: Non-dangerous goods
  - Label(s): —
  - Hazard No. (ADR): —
  - Tunnel restriction code: —
- 14.4 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

### ADN

- 14.1 UN Number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
  - Class: Non-dangerous goods
  - Label(s): —
- 14.3 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

### IMDG

- 14.1 UN Number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
  - Class: Non-dangerous goods
  - Label(s): —
  - EmS No.: —
- 14.3 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

### IATA

- 14.1 UN Number: —
- 14.2 Proper Shipping Name: —
- 14.3 Transport Hazard Class(es):
  - Class: Non-dangerous goods
  - Label(s): —
- 14.4 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: not applicable.

## SECTION 15: Regulatory information

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

**Product name:** TITAN EM 1540 MTU

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## EU Regulations

**Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer:** none

**Regulation (EC) No. 850/2004 on persistent organic pollutants:** none

### 15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

### Revision Information:

Vertical lines in the margin indicate an amendment.

### Wording of the R-phrases and H-statements in section 2 and 3

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
R36/38	Irritating to eyes and skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.
R60	May impair fertility.

### Training information:

Follow training instructions when handling this material.

### Other information:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. The classification results from the Conventional Method mentioned in regulation EU 1272/2008 (CLP).

### Revision Date:

01.04.2015



**Product name:** TITAN EM 1540 MTU

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**Disclaimer:**

The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.