

# Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.08.2017

Product: **Tynzer**

Version: 2.0

(ID no. 30617038/SDS\_CPA\_00/EN)

Date of print 15.02.2018

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## 1. Identification

### Product identifier

**Tynzer**

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

Relevant identified uses: crop protection product, herbicide

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

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Crop Protection

Telephone: +49 621 60-27777

E-mail address: Produktinformation-Pflanzenschutz@basf.com

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## 2. Hazards Identification

### Classification of the substance or mixture

According to UN GHS criteria

Repr. 1B (unborn child)

Aquatic Acute 1

Aquatic Chronic 1

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For the classifications not written out in full in this section the full text can be found in section 16.

## Label elements

### Globally Harmonized System (GHS)

Pictogram:



Signal Word:

**Danger**

Hazard Statement:

H360	May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

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.

Precautionary Statements (Prevention):

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/clothing.

Precautionary Statements (Response):

P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P391	Collect spillage.

Precautionary Statements (Storage):

P405	Store locked up.
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Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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Labeling of special preparations (GHS):

**May produce an allergic reaction. Contains: 1,2-BENZISOTHIAZOL-3(2H)-ONE**According to UN GHS criteria**Hazard determining component(s) for labelling: TOPRAMEZONE**

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**Other hazards**According to UN GHS criteria

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

**3. Composition/Information on Ingredients****Substances**

Not applicable

**Mixtures**Chemical nature

crop protection product, herbicide, suspension concentrate (SC)

Hazardous ingredients (GHS)

According to UN GHS criteria

topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-

Content (W/W): 29,7 %

CAS Number: 210631-68-8

Repr. 1B (unborn child)

Aquatic Acute 1

Aquatic Chronic 1

M-factor acute: 1

M-factor chronic: 100

H360, H400, H410

| Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt

Content (W/W): &lt; 5 %

CAS Number: 102980-04-1

Eye Dam./Irrit. 2A

Aquatic Acute 3

Aquatic Chronic 3

H319, H402, H412

| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one

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Content (W/W): < 0,05 %  
CAS Number: 2634-33-5  
EC-Number: 220-120-9  
INDEX-Number: 613-088-00-6

Acute Tox. 4 (oral)  
Skin Corr./Irrit. 2  
Eye Dam./Irrit. 1  
Skin Sens. 1  
Aquatic Acute 1  
M-factor acute: 10  
H318, H315, H302, H317, H400

Specific concentration limit:

Skin Sens. 1: >= 0,05 %

Propane-1,2-diol

Content (W/W): < 10 %  
CAS Number: 57-55-6  
EC-Number: 200-338-0

For the classifications not written out in full in this section the full text can be found in section 16.

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## 4. First-Aid Measures

### Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Immediately wash thoroughly with soap and water, seek medical attention.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

### Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:  
water spray, foam, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:  
water jet

### Special hazards arising from the substance or mixture

carbon monoxide, Carbon dioxide, nitrogen oxides, sulfur oxides  
The substances/groups of substances mentioned can be released in case of fire.

### Advice for fire-fighters

Special protective equipment:  
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

### Environmental precautions

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

### Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## 7. Handling and Storage

### Precautions for safe handling

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No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

### **Conditions for safe storage, including any incompatibilities**

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 60 Months

Protect from temperatures below: 0 °C

The product can crystallize below the limit temperature.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

### **Specific end use(s)**

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## **8. Exposure Controls/Personal Protection**

### **Control parameters**

Components with occupational exposure limits

| 57-55-6: Propane-1,2-diol

### **Exposure controls**

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

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Safety glasses with side-shields (frame goggles) (e.g. EN 166)

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

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## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Form:	suspension	
Colour:	off-white	
Odour:	aromatic	
Odour threshold:		
pH value:	Not determined due to potential health hazard by inhalation. approx. 2,5 - 4,5 (CIPAC standard water D, 1 %(m), 20 °C)	
crystallization temperature:	approx. -4 °C	
Boiling point:	approx. 100 °C	
Flash point:	No flash point - Measurement made up to the boiling point.	(Directive 92/69/EEC, A.9)
Evaporation rate:	not applicable	
Flammability:	Study does not need to be conducted.	
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Ignition temperature:	425 °C	(Directive 92/69/EEC, A.15)

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Vapour pressure:	approx. 23,3 hPa (20 °C)
Density:	Information applies to the solvent. approx. 1,12 g/cm <sup>3</sup> (20 °C)
Relative vapour density (air):	not applicable
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log Kow):	not applicable
Thermal decomposition:	210 °C, 330 kJ/kg Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Viscosity, dynamic:	approx. 78 mPa.s (20 °C, 100 1/s)
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating

### Other information

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

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## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

LD50 rat (oral): > 2.000 mg/kg (OECD Guideline 423)

No mortality was observed.

LC50 rat (by inhalation): > 5,8 mg/l 4 h (OECD Guideline 403)

No mortality was observed. An aerosol was tested.

LD50 rat (dermal): > 4.000 mg/kg (OECD Guideline 402)

No mortality was observed.

#### Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

#### Respiratory/Skin sensitization

Assessment of sensitization:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 429)

#### Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

#### Carcinogenicity

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**Assessment of carcinogenicity:**

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

**Assessment of carcinogenicity:**

*When given in high doses, the substance was carcinogenic in animal studies. Based on its mechanism of action, a carcinogenic potential is not expected after exposure to low doses.*

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**Reproductive toxicity****Assessment of reproduction toxicity:**

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

**Developmental toxicity****Assessment of teratogenicity:**

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

**Assessment of teratogenicity:**

*May cause harm to the unborn child.*

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**Specific target organ toxicity (single exposure)****Assessment of STOT single:**

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

**Repeated dose toxicity and Specific target organ toxicity (repeated exposure)****Assessment of repeated dose toxicity:**

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

**Assessment of repeated dose toxicity:**

*Adaptive effects were observed after repeated exposure in animal studies.*

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**Aspiration hazard**

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No aspiration hazard expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Other relevant toxicity information

Misuse can be harmful to health.

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## 12. Ecological Information

### Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:

LC50 (96 h) 8,71 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h) 12,1 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (7 d) > 0,064 mg/l (growth rate), *Lemna gibba* (OECD guideline 221)

EC50 (7 d) 0,0008 mg/l (growth rate), *Lemna gibba* (OECD guideline 221)

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (35 d) 0,12 mg/l, *Mysidopsis bahia*

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Assessment biodegradation and elimination (H<sub>2</sub>O):*

*Not readily biodegradable (by OECD criteria).*

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### Bioaccumulative potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

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*Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Bioaccumulation potential:*

*Bioconcentration factor: 0,69 (42 d), Lepomis macrochirus (OPPTS 850.1730 (EPA Guideline))*

*Does not significantly accumulate in organisms.*

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### **Mobility in soil**

Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-*

*Assessment transport between environmental compartments:*

*Adsorption in soil: Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.*

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### **Results of PBT and vPvB assessment**

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### **Other adverse effects**

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

### **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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## **13. Disposal Considerations**

### **Waste treatment methods**

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. Transport Information

### Land transport

ADR

UN number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user:

RID

UN number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

### Inland waterway transport

ADN

UN number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

### Transport in inland waterway vessel

Not evaluated

### Sea transport

IMDG

UN number: UN 3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)

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Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
	Marine pollutant: YES
Special precautions for user:	None known

**Air transport**

IATA/ICAO

UN number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

**UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

**UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

**Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

**Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

**Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

**Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

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

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated

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Ship Type:

Not evaluated

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## 15. Regulatory Information

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

To avoid risks to man and the environment, comply with the instructions for use.

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## 16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Repr.	Reproductive toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Eye Dam./Irrit.	Serious eye damage/eye irritation
Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Skin Sens.	Skin sensitization
H360	May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H319	Causes serious eye irritation.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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Vertical lines in the left hand margin indicate an amendment from the previous version.