

# Safety data sheet

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BASF Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 11.02.2026

Version: 8.0

Product: **Verresta**

(ID no. 30641221/SDS\_CPA\_KZ/EN)

Date of print 09.06.2026

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## 1. Identification

### Product identifier

## Verresta

### 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 Central Asia LLP  
Medeyskii district, Kynaeva street 77,  
050010-Almaty  
KAZAKHSTAN

Telephone: +7 727 323 23 33

E-mail address: EHS-Central-Asia@basf.com

### Emergency telephone number

LOCAL EMERGENCY NUMBER (KAZAKHSTAN):

112, 103 or 8 800 080 52 12 - 143

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

Asp. Tox. 1  
Flam. Liq. 4  
Skin Corr./Irrit. 2  
Eye Dam./Irrit. 2A  
Repr. 2 (unborn child)  
STOT SE 3 (May cause drowsiness and dizziness.)  
Aquatic Acute 2  
Aquatic Chronic 2

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:

H227	Combustible liquid.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging the unborn child.
H401	Toxic to aquatic life.
H411	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 carefully and follow all instructions.

#### Precautionary Statements (Prevention):

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P280	Wear protective gloves, protective clothing and eye protection or face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing mist or vapour or spray.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P312	Call a POISON CENTER or physician if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P391	Collect spillage.
P331	Do NOT induce vomiting.
P337 + P313	If eye irritation persists: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
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According to UN GHS criteria

Hazard determining component(s) for labelling: cycloxydim (ISO), Solvent naphtha (petroleum), heavy arom., Docusate sodium

**Other hazards**

According to UN GHS criteria

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

### 3. Composition/Information on Ingredients

#### Substances

Not applicable

#### Mixtures

##### Chemical nature

crop protection product, herbicide, Emulsifiable concentrate (EC)

##### Hazardous ingredients (GHS)

According to UN GHS criteria

##### cycloxydim (ISO)

Content (W/W): 10,63 %  
CAS Number: 101205-02-1  
EC-Number: 405-230-9

Acute Tox. 5 (oral)  
Repr. 2 (unborn child)  
H303, H361

##### Solvent naphtha (petroleum), heavy arom.

Content (W/W): < 60 %  
CAS Number: 64742-94-5  
EC-Number: 265-198-5  
INDEX-Number: 649-424-00-3

Asp. Tox. 1  
Flam. Liq. 4  
STOT SE 3 (drowsiness and dizziness)  
Aquatic Acute 2  
Aquatic Chronic 2  
H227, H304, H336, H401, H411

##### Docusate sodium

Content (W/W): < 5 %  
CAS Number: 577-11-7  
EC-Number: 209-406-4

Acute Tox. 5 (oral)  
Skin Irrit. 2  
Eye Dam. 1  
Aquatic Acute 2  
H318, H315, H303, H401

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

### 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, consult an eye specialist.

**On ingestion:**

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting due to aspiration hazard.

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

**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:  
foam, dry powder, carbon dioxide, water spray

**Special hazards arising from the substance or mixture**

Carbon monoxide, Carbon dioxide, sulfur oxides, nitrogen 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 the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

### 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.

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## 7. Handling and Storage

### Precautions for safe handling

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.

Protection against fire and explosion:

Vapours may form ignitable mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### 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: 24 Months

Protect from temperatures below: -10 °C

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

Protect from temperatures above: 30 °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

64742-94-5: solvent naphtha

CLV 600 mg/m<sup>3</sup> (GN MAC (KZ)), vapour

Measured as: carbon (C)

TWA value 300 mg/m<sup>3</sup> (GN MAC (KZ)), vapour

Measured as: carbon (C)

64742-94-5: Solvent naphtha (petroleum), heavy arom.

CLV 600 mg/m<sup>3</sup> (GN MAC (KZ)), vapour

Measured as: carbon (C)

TWA value 300 mg/m<sup>3</sup> (GN MAC (KZ)), vapour

Measured as: carbon (C)

### 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 ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

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.

## 9. Physical and Chemical Properties

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

State of matter:

liquid

Form:

liquid

Colour:

yellow to orange

Odour:

moderate odour, aromatic

Odour threshold:	Not determined due to potential health hazard by inhalation.	
Melting point:	The product has not been tested.	
Boiling point:	approx. 184 °C	Information applies to the solvent.
Flammability:	not applicable	
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.	
Flash point:	74 °C	(ISO 2719)
Auto-ignition temperature:	350 °C	(Directive 92/69/EEC, A.15)
Thermal decomposition:	135 °C, 40 kJ/kg (DSC (OECD 113)) 320 °C, 120 kJ/kg (DSC (OECD 113)) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
pH value:	approx. 3,4 - 5,4 (1 %(m), 20 °C)	
Viscosity, dynamic:	approx. 4,7 mPa.s (20 °C, 100 1/s)	
Thixotropy:	not thixotropic	
Solubility in water:	emulsifiable	
Partitioning coefficient n-octanol/water (log Kow):	The statements are based on the properties of the individual components.	
<i>Information on: cycloxydim (ISO); 2-(N-ethoxybutanimidoyl)-3-hydroxy-5-(tetrahydro-2H-thiopyran-3-yl)cyclohex-2-en-1-one</i>		
<i>Partitioning coefficient n-octanol/water (log Kow): 1,55</i> <i>(25 °C; pH value: 7)</i>		
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Vapour pressure:	approx. 0,1 kPa (20 °C) Information applies to the solvent.	
Density:	approx. 0,92 g/cm <sup>3</sup> (20 °C)	
Relative vapour density (air):	not applicable	
<u>Particle characteristics</u>		
Particle size distribution:	The substance / product is marketed or used in a non solid or granular form. -	

## 9.2. Other information

### Information with regard to physical hazard classes

#### Explosives

Explosion hazard: not explosive

#### Oxidizing properties

Fire promoting properties: not fire-propagating (Directive 2004/73/EC, A.21)

### Other safety characteristics

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

Evaporation rate: not applicable

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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 SDS 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 after a single skin contact. Virtually nontoxic by inhalation. 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): > 2.200 mg/kg

No mortality was observed.

LC50 rat (by inhalation): > 5,6 mg/l 4 h

No mortality was observed. An aerosol was tested.

LD50 rat (dermal): > 2.000 mg/kg

No mortality was observed.

### Irritation

Assessment of irritating effects:

Skin contact causes irritation. Eye contact causes irritation. 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: Irritant.

Serious eye damage/irritation rabbit: Irritant.

### Respiratory/Skin sensitization

Assessment of sensitization:

No sensitizing effect.

Experimental/calculated data:

modified Buehler test guinea pig: Non-sensitizing.

### 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

Assessment of carcinogenicity:

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

### 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: cycloxydim****Assessment of teratogenicity:**

*Indications of possible developmental toxicity/teratogenicity were seen in animal studies.*

**Information on: Docusate sodium****Assessment of teratogenicity:**

*The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses which impaired body weight gain in parental animals.*

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

Possible narcotic effects (drowsiness or dizziness).

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: cycloxydim****Assessment of repeated dose toxicity:**

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

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**Aspiration hazard**

May also damage the lung at swallowing (aspiration hazard).

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:**

Toxic to aquatic life with long lasting effects.

**Toxicity to fish:**

LC50 (96 h) 20,4 mg/l, Cyprinus carpio

**Aquatic invertebrates:**

EC50 (48 h) 15,5 mg/l, Daphnia magna (OECD Guideline 202, part 1)

**Aquatic plants:**

EC50 (72 h) > 100 mg/l (growth rate), Pseudokirchneriella subcapitata

EC50 (168 h) 0,144 mg/l

**Chronic toxicity to fish:**

EC10 (28 d) 6,66 mg/l, Oncorhynchus mykiss

**Chronic toxicity to aquatic invertebrates:**

No observed effect concentration (21 d) 0,78 mg/l, Daphnia magna

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

**Persistence and degradability****Assessment biodegradation and elimination (H2O):**

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

*Information on: cycloxydim (ISO); 2-(N-ethoxybutanimidoyl)-3-hydroxy-5-(tetrahydro-2H-thiopyran-3-yl)cyclohex-2-en-1-one*

*Assessment biodegradation and elimination (H2O):*

*Not readily biodegradable (by OECD criteria).*

**Bioaccumulative potential****Assessment bioaccumulation potential:**

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

*Information on: cycloxydim (ISO); 2-(N-ethoxybutanimidoyl)-3-hydroxy-5-(tetrahydro-2H-thiopyran-3-yl)cyclohex-2-en-1-one*

*Bioaccumulation potential:*

*Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.*

**Mobility in soil****Assessment transport between environmental compartments:**

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

*Information on: cycloxydim (ISO); 2-(N-ethoxybutanimidoyl)-3-hydroxy-5-(tetrahydro-2H-thiopyran-3-yl)cyclohex-2-en-1-one*

*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 or ID number: UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (SOLVENT NAPHTHA)

Transport hazard class(es): 9, EHS

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

RID

UN number or ID number: UN3082

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UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (SOLVENT NAPHTHA)

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

### **Inland waterway transport**

ADN

UN number or ID number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (SOLVENT NAPHTHA)

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 or ID number: UN 3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (SOLVENT NAPHTHA)

Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Marine pollutant: YES  
Special precautions for user: EmS: F-A; S-F

### **Air transport**

IATA/ICAO

UN number or ID number: UN 3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (SOLVENT NAPHTHA)

Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes

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Special precautions for user:                      None known

### Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

### Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

## 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.

## 16. Other Information

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

Asp. Tox.	Aspiration hazard
Flam. Liq.	Flammable liquids
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
Repr.	Reproductive toxicity
STOT SE	Specific target organ toxicity — single exposure
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Acute Tox.	Acute toxicity
Skin Irrit.	Skin irritation
Eye Dam.	Serious eye damage
H303	May be harmful if swallowed.
H361	Suspected of damaging the unborn child.
H227	Combustible liquid.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H318	Causes serious eye damage.
H315	Causes skin irritation.

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

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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.