

Safety data sheet

Page: 1/15

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

1. Identification

Product identifier

Fipronil

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

Relevant identified uses: crop protection product, insecticide

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

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Acute Tox. 4 (oral)

Skin Sens. 1B

STOT RE (Central nervous system) 2

Aquatic Acute 1

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

Aquatic Chronic 1

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:

Warning

Hazard Statement:

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs (Central nervous system) through prolonged or repeated exposure.
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 carefully and follow all instructions.

Precautionary Statements (Prevention):

P260	Do not breathe mist.
P264	Wash contaminated body parts thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/clothing/eye protection.

Precautionary Statements (Response):

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth
P333 + P311	If skin irritation or rash occurs: Call a POISON CENTER or physician.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

Precautionary Statements (Disposal):

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

P501

Dispose of contents and container to hazardous or special waste collection point.

According to UN GHS criteria

Hazard determining component(s) for labelling: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile, 2-Methyl-2H-isothiazol-3-one

Other hazardsAccording 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

MixturesChemical nature

crop protection product, insecticide, suspension concentrate (SC)

Hazardous ingredients (GHS)

According to UN GHS criteria

fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Content (W/W): 4,94 %

CAS Number: 120068-37-3

EC-Number: 424-610-5

INDEX-Number: 608-055-00-8

Acute Tox. 2 (Inhalation - dust)

Acute Tox. 3 (oral)

Acute Tox. 3 (dermal)

STOT RE (Central nervous system) 1

Aquatic Acute 1

Aquatic Chronic 1

M-factor acute: 1000

M-factor chronic: 10000

H311, H330, H301, H372, H400, H410

| 2-Methyl-2H-isothiazol-3-one

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

Content (W/W): < 0,005 %
 CAS Number: 2682-20-4
 EC-Number: 220-239-6
 INDEX-Number: 613-326-00-9

Acute Tox. 2 (Inhalation - dust)
 Acute Tox. 3 (oral)
 Acute Tox. 3 (dermal)
 Skin Corr./Irrit. 1B
 Eye Dam./Irrit. 1
 Skin Sens. 1A
 Aquatic Acute 1
 Aquatic Chronic 1
 M-factor acute: 10
 M-factor chronic: 1
 H330, H317, H314, H301 + H311, H400, H410
 EUH071

Specific concentration limit:

Skin Sens. 1A: >= 0,0015 %

Corn oil

Content (W/W): < 25 %
 CAS Number: 8001-30-7
 EC-Number: 232-281-2

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.

4. First-Aid Measures

Description of first aid measures

Remove contaminated clothing.

If inhaled:

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

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

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

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

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

Indication of any immediate medical attention and special treatment needed

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

5. Fire-Fighting Measures**Extinguishing media**

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Carbon monoxide, Hydrogen fluoride, Carbon dioxide, Hydrogen chloride, nitrogen oxides, sulfur oxides, halogenated compounds, nitriles

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:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. 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.

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.

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

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:

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.

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.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

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

8001-30-7: Corn oil

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 and alkaline compounds (e.g. EN 14387 Type ABEK).

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:

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

Body protection:

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

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

Information on basic physical and chemical properties

Form:	liquid
Colour:	white to yellow
Odour:	faint odour, sweetish
Odour threshold:	
	Not determined due to potential health hazard by inhalation.
pH value:	approx. 6 - 8 (100 g/l, 20 °C)
Freezing point:	approx. -3,7 °C
Boiling point:	approx. 100 °C
	Information applies to the solvent.
Flash point:	
	No flash point - Measurement made up to the boiling point.
Evaporation rate:	
	not applicable
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.
Ignition temperature:	
	Based on the water content the product does not ignite.

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

Vapour pressure:	approx. 23 hPa (20 °C)
Density:	Information applies to the solvent. approx. 1,01 g/cm ³ (20 °C)
Relative vapour density (air):	not applicable
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log K _{ow}):	not applicable
Thermal decomposition:	110 °C, 40 kJ/kg (DSC (OECD 113)) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Viscosity, dynamic:	approx. 35 mPa.s (40 °C, 100 1/s)
Viscosity, kinematic:	approx. 34 mm ² /s (40 °C)
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., The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

Hazardous decomposition products:

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

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

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

Experimental/calculated data:

LD50 rat (oral): > 1.498 mg/kg

LC50 rat (by inhalation): > 5,0 mg/l 4 h (OECD Guideline 403)

An aerosol was tested.

LD50 rat (dermal): > 2.000 mg/kg

No mortality was observed.

Irritation

Assessment of irritating effects:

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

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

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. Sensitization after skin contact possible.

Experimental/calculated data:

modified Buehler test guinea pig: skin 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.

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

Carcinogenicity

Assessment of carcinogenicity:

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

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Assessment of carcinogenicity:

In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

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. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

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: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Assessment of repeated dose toxicity:

Causes mortality and signs of neurotoxicity through prolonged or repeated exposure.

Aspiration hazard

No aspiration hazard expected.

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

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.

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 the properties of the individual components.

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Toxicity to fish:

LC50 (96 h) 0,0852 mg/l, Lepomis macrochirus

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Aquatic invertebrates:

EC50 (48 h) 0,19 mg/l, Daphnia magna

| EC50 (96 h) 0,00017 mg/l, Mysis bahia

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Aquatic plants:

EC50 (72 h) 0,103 mg/l (growth rate), Scenedesmus subspicatus

No observed effect concentration (14 d) > 0,16 mg/l, Lemna gibba

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Chronic toxicity to fish:

| No observed effect concentration (35 d) 0,0029 mg/l, Cyprinodon variegatus

Information on: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Chronic toxicity to aquatic invertebrates:

| No observed effect concentration (28 d) 0,000008 mg/l, Mysis bahia

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

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: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

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: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Bioaccumulation potential:

*Bioconcentration factor: 321, *Lepomis macrochirus**

Accumulation in organisms is not to be expected.

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: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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.

14. Transport Information

Land transport

ADR

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

RID

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains FIPRONIL)
Transport hazard class(es):	9, EHS
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,

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

Transport hazard class(es): N.O.S. (contains FIPRONIL)
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 FIPRONIL)
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 FIPRONIL)
Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

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
Ship Type: Not evaluated

Further information

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

Date / Revised: 11.01.2021

Version: 3.0

Product: **Fipronil**

(ID no. 30782119/SDS_CPA_00/EN)

Date of print 05.05.2024

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).

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:

Acute Tox.	Acute toxicity
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity — repeated exposure
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
H311	Toxic in contact with skin.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.
H301 + H311	Toxic if swallowed or in contact with skin
EUH071	Corrosive to the respiratory tract.

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.

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