

# Safety data sheet

Page: 1/15

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time. Date / Revised: 08.11.2019 Version: 2.0 Date previous version: 07.01.2019 Previous version: 1.0 Product: Storm Ultra Secure

(ID no. 30682582/SDS\_GEN\_GB/EN) Date of print 08.11.2019

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

1.1. Product identifier

## **Storm Ultra Secure**

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

Relevant identified uses: rodenticide, biocide

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

<u>Company:</u> BASF SE 67056 Ludwigshafen GERMANY <u>Contact address:</u> BASF plc PO Box 4, Earl Road, Cheadle Hulme, Cheadle, Cheshire SK8 6QG, UNITED KINGDOM

Telephone: +44 161 485-6222 E-mail address: product-safety-north@basf.com

## 1.4. Emergency telephone number

International emergency number: Telephone: +49 180 2273-112

## **SECTION 2: Hazards Identification**

## 2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time. Date / Revised: 08.11.2019 Version: 2.0 Date previous version: 07.01.2019 Previous version: 1.0 Product: **Storm Ultra Secure** 

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

Page: 2/15

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

## 2.2. Label elements

Globally Harmonized System (GHS) in accordance with UK regulations.

The product does not require a hazard warning label in accordance with GHS criteria.

#### 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

See section 12 - Results of PBT and vPvB assessment.

This product is hazardous to mammals, including domesticated animals, and birds. Exposure of non-target animals should be prevented.

## **SECTION 3: Composition/Information on Ingredients**

## 3.1. Substances

Not applicable

## 3.2. Mixtures

Chemical nature

Biocidal product, rodenticide, Bait

Contains: flocoumafen (ISO); reaction mass of: cis-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumari n; trans-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumarin (Content (W/W): 0.0025 %)

<u>Hazardous ingredients (GHS)</u> according to Regulation (EC) No. 1272/2008

Cut wheat

Content (W/W): < 80 % CAS Number: 130498-22-5 EC-Number: 603-421-3

Sucrose

Page: 3/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

Content (W/W): < 10 % CAS Number: 57-50-1 EC-Number: 200-334-9

Magnesium distearate Content (W/W): < 10 % CAS Number: 557-04-0 EC-Number: 209-150-3

Propane-1,2-diol

Content (W/W): < 5 % CAS Number: 57-55-6 EC-Number: 200-338-0 REACH registration number: 01-2119456809-23

## **SECTION 4: First-Aid Measures**

**4.1. Description of first aid measures** Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

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: Rinse mouth and then drink 200-300 ml of water.

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

Symptoms: coagulation disorders

Increased tendency to bleed.

In severe cases, massive bleeding from internal organs may result in circulatory shock, which could prove fatal.

The onset of symptoms is delayed for up to 4 days after uptake.

Hazards: The substance / product is an anticoagulant rodenticide with a coumarin-type mode of action.

Page: 4/15

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time. Date / Revised: 08.11.2019 Version: 2.0 Date previous version: 07.01.2019 Previous version: 1.0 Product: **Storm Ultra Secure** 

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

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

Treatment: Symptomatic treatment (decontamination, vital functions). Antidote: Vitamin K1 preparation as antidote.

## **SECTION 5: Fire-Fighting Measures**

#### 5.1. Extinguishing media

Suitable extinguishing media: water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons: carbon dioxide

#### 5.2. Special hazards arising from the substance or mixture

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

## 5.3. 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.

## **SECTION 6: Accidental Release Measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

#### 6.2. Environmental precautions

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

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.

## 6.3. Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of. For large amounts: Sweep/shovel up.

Page: 5/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

Avoid raising dust. 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.

#### 6.4. Reference to other sections

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

## **SECTION 7: Handling and Storage**

#### 7.1. 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.

If dead and/or dying rats or mice are found during and after the control program, these must be cleared away immediately in order to avoid secondary poisoning phenomena. Do not apply in the open – cover bait points or use bait boxes.

#### Protection against fire and explosion:

Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

#### 7.2. Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds. Odour-sensitive: Segregate from products releasing odours. Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

## 7.3. 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.

## **SECTION 8: Exposure Controls/Personal Protection**

#### 8.1. Control parameters

#### Components with occupational exposure limits

Refer to the current edition of HSE Guidance Note EH40 Occupational Exposure Limits (United Kingdom). For normal use and handling refer to the product label/leaflet. In all other cases the following apply.

57-50-1: Sucrose

STEL value 20 mg/m3 (WEL/EH 40 (UK)) TWA value 10 mg/m3 (WEL/EH 40 (UK))

Page: 6/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

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

TWA value 474 mg/m3 ; 150 ppm (WEL/EH 40 (UK)), Total vapour and particulates TWA value 10 mg/m3 (WEL/EH 40 (UK)), Particulate

#### 8.2. Exposure controls

Personal protective equipment

Respiratory protection: Respiratory protection not required.

Hand protection:

Protective gloves (EN 374) are required for the safe handling of this product and are also recommended for protection against rodent-borne diseases. e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other

e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Required when there is a risk of eye contact., 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

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

## **SECTION 9: Physical and Chemical Properties**

## 9.1. Information on basic physical and chemical properties

Form:	blocks
Colour:	blue
Odour:	characteristic
Odour threshold:	
	Not determined due to potential
pH value:	health hazard by inhalation. approx. 6 - 8
pi i value.	(20 °C)
Melting point:	
	not applicable
Boiling point:	
	not applicable

Page: 7/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS GEN GB/EN) Date of print 08.11.2019 Flash point: not applicable, the product is a solid Evaporation rate: not applicable not highly flammable Flammability: 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. Vapour pressure: not applicable Relative vapour density (air): not applicable Solubility in water: insoluble Partitioning coefficient n-octanol/water (log Kow): The statements are based on the properties of the individual components. Information on: Sucrose Partitioning coefficient n-octanol/water (log Kow): -3.27 Literature data. Self ignition: not self-igniting Thermal decomposition: No decomposition if stored and handled as prescribed/indicated. Viscosity, dynamic: not applicable, the product is a solid Explosion hazard: not explosive Fire promoting properties: not fire-propagating 9.2. Other information Self heating ability: It is not a substance capable of spontaneous heating. Bulk density: approx. 520 kg/m3 Apparent density after tamping

Page: 8/15

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time. Date / Revised: 08.11.2019 Version: 2.0 Date previous version: 07.01.2019 Previous version: 1.0 Product: **Storm Ultra Secure** 

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

## **SECTION 10: Stability and Reactivity**

#### 10.1. Reactivity

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

#### 10.2. Chemical stability

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

#### 10.3. Possibility of hazardous reactions

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

#### 10.4. Conditions to avoid

See SDS section 7 - Handling and storage.

#### 10.5. Incompatible materials

Substances to avoid: strong acids, strong bases, strong oxidizing agents

#### 10.6. Hazardous decomposition products

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

## **SECTION 11: Toxicological Information**

## 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Virtually nontoxic after a single ingestion. 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): > 5,000 mg/kg

LC50 rat (by inhalation): > 5 mg/l

LD50 rat (dermal): > 5,000 mg/kg

Irritation

Assessment of irritating effects:

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

Page: 9/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

Experimental/calculated data: Skin corrosion/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: non-irritant

#### Respiratory/Skin sensitization

Assessment of sensitization:

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

## Experimental/calculated data:

Closed-patch Test guinea pig: Non-sensitizing.

#### Germ cell mutagenicity

#### Assessment of mutagenicity:

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

#### Carcinogenicity

#### Assessment of carcinogenicity:

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

#### Reproductive toxicity

Assessment of reproduction toxicity:

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

#### 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: flocoumafen (ISO); reaction mass of: cis-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumari n; trans-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumarin Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

*EU-classification The substance belongs to the group of anticoagulant rodenticides structurally similar to warfarin, which are collectively classified similar to warfarin.* 

Page: 10/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

#### 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: flocoumafen (ISO); reaction mass of: cis-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumari n; trans-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumarin (4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumarin Assessment of repeated dose toxicity:

Repeated exposure to small quantities may affect certain organs. Damages the coagulation system.

#### Aspiration hazard

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.

## **SECTION 12: Ecological Information**

#### 12.1. Toxicity

Assessment of aquatic toxicity: There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment of terrestrial toxicity: Hazardous to birds and mammals.

## 12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):

Page: 11/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019 The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Sucrose Assessment biodegradation and elimination (H2O): The product is biodegradable.

## 12.3. 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: Sucrose

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

-----

## 12.4. Mobility in soil

Assessment transport between environmental compartments: Volatility: No data available.

## 12.5. Results of PBT and vPvB assessment

The product contains a potential PBT substance.

The product contains a potential vPvB substance.

Information on: flocoumafen (ISO); reaction mass of: cis-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumari n; trans-4-hydroxy-3-(1,2,3,4-tetrahydro-3-(4-(4-trifluoromethylbenzyloxy)phenyl)-1-naphthyl)coumarin Fulfills the criteria for PBT and vPvB

## **12.6. Other adverse effects**

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

## 12.7. Additional information

Other ecotoxicological advice: Must not be discharged into the environment.

Page: 12/15

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time. Date / Revised: 08.11.2019 Version: 2.0 Date previous version: 07.01.2019 Previous version: 1.0 Product: **Storm Ultra Secure** 

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

## **SECTION 13: Disposal Considerations**

## 13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

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

## **SECTION 14: Transport Information**

#### Land transport

#### ADR

Not classified as a dangerous good under transport regulations
Not applicable
None known

Net des sites a des services as a des des des transmissions and the service of th

. .

. .

#### RID

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for	None known
user	

NT . 4 . 1

## Inland waterway transport

ADN

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable

Page: 13/15

 BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

 Date / Revised: 08.11.2019
 Version: 2.0

 Date previous version: 07.01.2019
 Previous version: 1.0

 Product: Storm Ultra Secure
 Version: 2.0

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

Packing group: Not applicable Environmental hazards: Not applicable Special precautions for None known user:

<u>Transport in inland waterway vessel</u> Not evaluated

#### Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for	None known
user	

#### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulationsUN number:Not applicableUN proper shipping name:Not applicableTransport hazard class(es):Not applicablePacking group:Not applicableEnvironmental hazards:Not applicableSpecial precautions forNone knownuserNone known

#### 14.1. UN number

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

#### 14.2. UN proper shipping name

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

#### 14.3. Transport hazard class(es)

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

Page: 14/15

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time. Date / Revised: 08.11.2019 Version: 2.0 Date previous version: 07.01.2019 Previous version: 1.0 Product: **Storm Ultra Secure** 

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019

## 14.4. Packing group

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

#### 14.5. Environmental hazards

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

#### 14.6. Special precautions for user

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

#### 14.7. 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

## **SECTION 15: Regulatory Information**

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

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU): Listed in above regulation: no

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

#### 15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

## **SECTION 16: Other Information**

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German

Page: 15/15

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time. Date / Revised: 08.11.2019 Version: 2.0 Date previous version: 07.01.2019 Previous version: 1.0 Product: **Storm Ultra Secure** 

(ID no. 30682582/SDS\_GEN\_GB/EN)

Date of print 08.11.2019 national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

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.