

Safety data sheet

Page: 1/15

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

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

1.1. Product identifier

Vitamin E-Acetate (DL-alpha-tocopheryl acetate)

Chemical name: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

CAS Number: 7695-91-2

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

Relevant identified uses: feed additive(s), food additive(s)

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY

Contact address:
OOO BASF
37A-4, Leningradsky Prospekt
Moscow, 125167
RUSSIAN FEDERATION

Telephone: +7 495 231-7200 or 8 800 200 58 37

E-mail address: info.russia@basf.com

1.4. Emergency telephone number

LOCAL EMERGENCY NUMBER (Russia)

8 800 200 58 37

International emergency number:

Telephone: +49 180 2273-112

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

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

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

2.2. Label elements

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

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]

High risk of slipping due to leakage/spillage of product.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Chemical nature

3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Content (W/W): $\geq 96\%$ - $\leq 100\%$

CAS Number: 7695-91-2

EC-Number: 231-710-0

Regulatory relevant ingredients

| No particular hazards known.

3.2. Mixtures

Not applicable

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Remove contaminated clothing.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

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: (Further) symptoms and / or effects are not known so far

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

Treatment: Symptomatic treatment (decontamination, vital functions).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

water spray, carbon dioxide, dry powder, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:

water jet

5.2. Special hazards arising from the substance or mixture

Endangering substances: harmful vapours, carbon oxides

Advice: Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Do not spray water directly on fire, product will float and could be reignited on surface of water.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Cool endangered containers with water-spray.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

SECTION 6: Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For small amounts: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with 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 provided product is used correctly.

Protection against fire and explosion:

Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Protect against heat.

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.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

No substance specific occupational exposure limits known.

PNEC

freshwater: 0,27 mg/l

marine water: 0,027 mg/l

intermittent release: 0,27 mg/l

sediment (freshwater): 212000 mg/kg

sediment (marine water): 21200 mg/kg

soil: 74800 mg/kg

STP: 100 mg/l

DNEL

worker:

Long-term exposure- systemic effects, Inhalation: 73,5 mg/m³

worker:

Long-term exposure- systemic effects, dermal: 416,6 mg/kg

consumer:

Long-term exposure- systemic effects, Inhalation: 21,7 mg/m³

consumer:

Long-term exposure- systemic effects, dermal: 250 mg/kg

consumer:

Long-term exposure- systemic effects, oral: 12,5 mg/kg

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

Eye protection:

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

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	liquid	
Form:	oily	
Colour:	colourless to amber	
Odour:	almost odourless	
Melting point:	< -20 °C	
	Study scientifically not justified.	
Boiling point:	(1.013 hPa)	
	The substance / product decomposes therefore not determined., Study scientifically not justified.	
Flammability:	hardly combustible	(derived from flash point)
Lower explosion limit:	For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Flash point:	257 °C	(ISO 2719, closed cup)
Auto-ignition temperature:	382 °C	(DIN EN 14522)
Thermal decomposition:	> 430 °C (DSC (DIN 51007))	
pH value:		
	not soluble	
Viscosity, kinematic:	5.706 mm ² /s (20 °C)	(OECD 114)

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

	701 mm ² /s (40 °C)	(OECD 114)
Solubility in water:	sparingly soluble < 0,8 mg/l (20 °C)	(OECD Guideline 105)
Partitioning coefficient n-octanol/water (log Kow):	12,25 (25 °C)	(calculated)
Vapour pressure:	< 0,000001 hPa (25 °C)	(calculated)
Density:	0,98 g/cm ³ (20 °C)	
	Literature data.	
Relative vapour density (air):	approx. 16 (20 °C)	(calculated)
	Heavier than air.	

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: Based on the chemical structure there is no indication of explosive properties.

Oxidizing properties

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

Pyrophoric properties

Self-ignition temperature: Test type: Spontaneous self-ignition at room-temperature.

Based on its structural properties the product is not classified as self-igniting.

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of spontaneous heating.
Not tested on account of the low melting-point.

Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases: Forms no flammable gases in the presence of water.

Corrosion to metals

No corrosive effect on metal.

Other safety characteristics

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

Surface tension:

Based on chemical structure, surface activity is not to be expected.

Molar mass:

472,75 g/mol

SECTION 10: Stability and Reactivity

10.1. Reactivity

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

Corrosion to metals: No corrosive effect on metal.

Formation of flammable gases:

Remarks:

Forms no flammable gases in the presence of water.

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

Avoid direct sunlight. Avoid heat. See SDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:

strong alkalis, 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

Experimental/calculated data:

LD50 rat (oral): > 10.000 mg/kg (BASF-Test)

(by inhalation): Study not necessary due to exposure considerations.

LD50 rat (dermal): > 3.000 mg/kg (similar to OECD guideline 402)

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

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:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

photo-allergy test guinea pig: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammals.

Carcinogenicity

Assessment of carcinogenicity:

In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

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

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on available data, the classification criteria are not met.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Repeated oral uptake of the substance did not cause substance-related effects.

Aspiration hazard

No aspiration hazard expected.

Interactive effects

No data available.

11.2. Information on other hazards

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. No toxic effects occur within the range of solubility. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) > 11 mg/l, *Oncorhynchus mykiss* (OECD Guideline 203, static)

The statement of the toxic effect relates to the analytically determined concentration. No toxic effects occur within the range of solubility.

Aquatic invertebrates:

EC50 (48 h) > 20,6 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

The statement of the toxic effect relates to the analytically determined concentration. No toxic effects occur within the range of solubility.

Aquatic plants:

EC50 (72 h) > 27,8 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration. No toxic effects occur within the range of solubility.

Microorganisms/Effect on activated sludge:

EC20 (30 min) > 927 mg/l, activated sludge, domestic (DIN EN ISO 8192, aquatic)

The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to fish:

No observed effect concentration (28 d) > 100 mg/l, *Oncorhynchus mykiss* (OECD Guideline 215, semistatic)

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

Chronic toxicity to aquatic invertebrates:
Study scientifically not justified.

Assessment of terrestrial toxicity:
No data available.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O):
Moderately/partially biodegradable. Not readily biodegradable (by OECD criteria). The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Elimination information:
30 - 40 % BOD of the ThOD (28 d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D) (aerobic, activated sludge, domestic)

Assessment of stability in water:
In contact with water the substance will hydrolyse slowly.

Information on Stability in Water (Hydrolysis):
 $t_{1/2}$ 326 d (25 °C, pH value 7), (calculated, pH 7)

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:
Accumulation in organisms is not to be expected.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Volatility: The substance will slowly evaporate into the atmosphere from the water surface.
Adsorption in soil: Adsorption to solid soil phase is expected.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

12.6. Endocrine disrupting properties

12.7. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Observe national and local legal requirements.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

Use packages for recycling only when totally empty.

SECTION 14: Transport Information

Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number or ID 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 user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number or ID 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 user	None known

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

Inland waterway transport

ADN

	Not classified as a dangerous good under transport regulations
UN number or ID 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 user:	None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number or ID 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 user:	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number or ID 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 user:	None known

14.1. UN number or ID number

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

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

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.

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. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

SECTION 15: Regulatory Information

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

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

15.2. Chemical Safety Assessment

Product is not classified as hazardous.

SECTION 16: Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

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 national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards.

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 17.04.2023

Version: 3.0

Date previous version: 30.01.2023

Previous version: 2.0

Date / First version: 28.03.2022

Product: **Vitamin E-Acetate (DL-alpha-tocopheryl acetate)**

(ID no. 30041054/SDS_GEN_RU/EN)

Date of print 11.10.2025

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.