

## Safety Data Sheet

according to Regulation (EU) 2015/830 Issue date: 3/22/2024 Revision date: 3/22/2024 Version: 1.2

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

### **1.1. Product identifier**

Product form	: Substance (UVCB)
Product name	: CINNAMON LEAF B & F OIL
EC-No.	: 283-479-0
CAS-No.	: 8015-91-6
Product code	: 50-6080-11
Product group	: Trade product

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

#### 1.2.1. Relevant identified uses

No additional information available

#### 1.2.2. Uses advised against

No additional information available

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

The Lebermuth Company 4004 Technology Drive 46628 South Bend, IN United States T 574-259-7000 - F 574-258-7450 info@lebermuth.com - www.lebermuth.com

### 1.4. Emergency telephone number

Emergency number

: CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300 CCN 13010

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Carcinogenicity, Category 1B	H350
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411
Full text of H- and EUH-statements: see section 16	

#### Adverse physicochemical, human health and environmental effects

May cause cancer. Suspected of causing genetic defects. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Labelling according to Regulation (EC) No. 12	72/2008 [CLP]
Hazard pictograms (CLP)	
	GHS07 GHS08 GHS09
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction.
	H341 - Suspected of causing genetic defects.
	H350 - May cause cancer.
	H411 - Toxic to aquatic life with long lasting effects.

# Safety Data Sheet

according to Regulation (EU) 2015/830

Precautionary statements (CLP)	<ul> <li>P201 - Obtain special instructions before use.</li> <li>P202 - Do not handle until all safety precautions have been read and understood.</li> <li>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.</li> <li>P272 - Contaminated work clothing should not be allowed out of the workplace.</li> <li>P273 - Avoid release to the environment.</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P308+P313 - IF exposed or concerned: Get medical advice/attention.</li> <li>P321 - Specific treatment (see supplemental first aid instruction on this label).</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P391 - Collect spillage.</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of contents/container to hazardous or special waste collection point, in</li> </ul>
	P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## 2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Substance type Custom name CAS-No. EC-No.	: UVCB : CINNAMON LEAF OIL : 8015-91-6 : 283-479-0	
Name	Product identifier	%
CINNAMON LEAF OIL	CAS-No.: 8015-91-6 EC-No.: 283-479-0	100

## 3.2. Mixtures

Not applicable

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/effects after skin contact	: May cause an allergic skin reaction.
4.3. Indication of any immediate medi	ical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.

# Safety Data Sheet

according to Regulation (EU) 2015/830

5.2. Special hazards arising from the substance or mixture	
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures	
6.1. Personal precautions, protective e	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapours/spray.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up	
For containment	: Collect spillage.
Methods for cleaning up	<ul> <li>Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.</li> </ul>
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including any incompatibilities	

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
7.3. Specific end use(s)	

No additional information available

## Safety Data Sheet

according to Regulation (EU) 2015/830

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.1.1 National occupational exposure and biological limit values

No additional information available

### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

**Eye protection:** Safety glasses

### 8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Protective gloves

#### 8.2.2.3. Respiratory protection

Respiratory protection: [In case of inadequate ventilation] wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

### Environmental exposure controls:

Avoid release to the environment.

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

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
рН	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 85 °C

## Safety Data Sheet

according to Regulation (EU) 2015/830

Auto-ignition temperature Decomposition temperature Flammability (solid, gas) Vapour pressure Relative vapour density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Viscosity, kinematic	<ul> <li>No data available</li> <li>No data available</li> <li>Not applicable</li> <li>No data available</li> <li>No data available</li> <li>1.04 (1.017 – 1.055)</li> <li>Insoluble.</li> <li>No data available</li> <li>No data available</li> <li>No data available</li> </ul>
Viscosity, kinematic Viscosity, dynamic	: No data available : No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
9.2. Other information	

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

VOC content

Refractive index

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### **10.3. Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: 10.5 %

: 1.529 (1.515 - 1.545)

SECTION 11: Toxicological information		
11.1 Information on toxicological effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	:	Not classified Not classified Not classified
CINNAMON LEAF OIL (8015-91-6)		
LD50 oral		2650 mg/kg bodyweight
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Suspected of causing genetic defects.
Carcinogenicity	:	May cause cancer.
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified

# Safety Data Sheet

according to Regulation (EU) 2015/830

### Aspiration hazard

: Not classified

SECTION 12: Ecological information	
12.1. Toxicity	
Hazardous to the aquatic environment, short-term (acute)	<ul> <li>Toxic to aquatic life with long lasting effects.</li> <li>Not classified</li> <li>Toxic to aquatic life with long lasting effects.</li> </ul>
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

14.1 UN number	
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	<ul> <li>: UN 3082</li> </ul>
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID) Transport document description (ADR)	<ul> <li>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cinnamon leaf oil)</li> <li>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cinnamon leaf oil)</li> <li>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cinnamon leaf oil)</li> </ul>
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cinnamon leaf oil), 9, III, MARINE POLLUTANT
Transport document description (IATA) Transport document description (ADN)	<ul> <li>UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Cinnamon leaf oil), 9, III</li> <li>UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cinnamon leaf oil), 9, III</li> </ul>

## Safety Data Sheet

according to Regulation (EU) 2015/830

Transport document description (RID)

### 14.3. Transport hazard class(es)

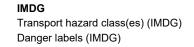
### ADR

Transport hazard class(es) (ADR) Danger labels (ADR)



leaf oil), 9, III

: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Cinnamon





: 9

: 9 :

### ΙΑΤΑ

Transport hazard class(es) (IATA) Danger labels (IATA)

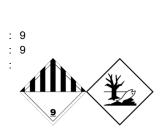
# ADN

Transport hazard class(es) (ADN) Danger labels (ADN)

### RID

Transport hazard class(es) (RID) Danger labels (RID)

14.4. Packing group





14.4.1 doking group	
Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)	: III : III : III : III
14.5. Environmental hazards	
Dangerous for the environment Marine pollutant Other information	: Yes : Yes : No supplementary information available

# Safety Data Sheet

according to Regulation (EU) 2015/830

# 14.6. Special precautions for user

### **Overland transport**

Overland transport	
Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 51
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions	: TP1, TP29
(ADR)	, -
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Loading, unloading	: CV13
and handling (ADR)	. 6013
- · · ·	. 00
Hazard identification number (Kemler No.)	: 90
Orange plates	<sup>2</sup> 90
	3082
	5002
Tunnel restriction code (ADR)	: -
EAC code	: •3Z
Transport by sea	
Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
clowage category (IMDC)	. /
Air transport	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	-
· · · · · · · · · · · · · · · · · · ·	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA) CAO max net quantity (IATA)	: 964 : 450L
Special provisions (IATA)	: A97, A158, A197, A215
ERG code (IATA)	: 9L
Inland waterway transport	
Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: Т
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0
Rail transport	
Classification code (RID)	: M6

# Safety Data Sheet

according to Regulation (EU) 2015/830

Special provisions (RID) Limited quantities (RID) Excepted quantities (RID) Packing instructions (RID) Special packing provisions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions	:	274, 335, 375, 601 5L E1 P001, IBC03, LP01, R001 PP1 MP19 T4 TP1, TP29
(RID) Tank codes for RID tanks (RID) Transport category (RID) Special provisions for carriage – Packages (RID) Special provisions for carriage - Loading, unloading and handling (RID) Colis express (express parcels) (RID) Hazard identification number (RID)	:	LGBV 3 W12 CW13, CW31 CE8 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

### Not applicable

## SECTION 15: Regulatory information

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

### 15.1.1. EU-Regulations

EU restriction list (REAC	CH Annex XVII)	
Reference code	Applicable on	
3(b) C	CINNAMON LEAF OIL	
3(c) (	CINNAMON LEAF OIL	
Not listed on the REACH Can Not listed on REACH Annex X Not listed on the PIC list (Reg Not listed on the POP list (Reg Contains no substance(s) liste VOC content	KIV (Authorisation List) ulation EU 649/2012) gulation EU 2019/1021	) recursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors) : 10.5 %
15.1.2. National regulations		
Listed on the United States TS Listed on the Canadian DSL (	-	
Germany		
Water hazard class (WGK)		: WGK 2, Significantly hazardous to water (Classification according to AwSV; ID No. 2888)
Hazardous Incident Ordinance	e (12. BImSchV)	: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
Netherlands		
SZW-lijst van kankerverwekke	ende stoffen	: CINNAMON LEAF B & F OIL is listed
SZW-lijst van mutagene stoffe	en	: CINNAMON LEAF B & F OIL is listed
SZW-lijst van reprotoxische st	toffen – Borstvoeding	: The substance is not listed
SZW-lijst van reprotoxische st Vruchtbaarheid	toffen –	: The substance is not listed
SZW-lijst van reprotoxische st	toffen – Ontwikkeling	: The substance is not listed
Denmark		
Class for fire hazard		: Class III-1
Store unit		: 50 liter
Classification remarks		: Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations		: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

# Safety Data Sheet

according to Regulation (EU) 2015/830

### Switzerland

Storage class (LK)

: LK 6.1 - Toxic materials

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Abbreviations and acroyms:           ADN         European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways           ADR         European Agreement concerning the International Carriage of Dangerous Goods by Road           ATE         Acute Toxicity Estimate           BCF         Bioconcentration factor           BLV         Biological limit value           BOD         Biochemical oxygen demand (BOD)           COD         Chemical oxygen demand (BOD)           CDD         Derived Minimal Effect Ievel           DNEL         Derived Minimal Effect Ievel           DNEL         Derived Minimal Effect Ievel           DNEL         European Community number           ECSO         Median effective concentration           ENR         European Standard           IARC         International Agency for Research on Cancer           IARA         Inter		
ADR         European Agreement concerning the International Carriage of Dangerous Goods by Road           ATE         Acute Toxicity Estimate           BCF         Bioconcentration factor           BLV         Biological limit value           BOD         Biochemical oxygen demand (BOD)           COD         Chemical oxygen demand (COD)           DMEL         Derived Minimal Effect level           DNEL         Derived Minimal Effect level           EC-No.         European Community number           EC50         Median effective concentration           EN         European Standard           IARC         International Agency for Research on Cancer           IATA         International Agency for Research on Cancer           IATA         International Airitime Dangerous Goods           LOS0         Median lefthal dose           LOS0         Median lefthal dose           LOAEL         No-Deserved Adverse Effect Level           NOAEC         No-Deserved Adverse Effect Level           NOAEC         No-Deserved Effect Concentration           NOAEC         No-Deserved Adverse Effect Level           NOAEC         No-Deserved Effect Concentration           OECD         Organisation for Econonic Co-operation and Development           OEL	Abbreviations and acr	ronyms:
ATE     Acute Toxicity Estimate       BCF     Bioconcentration factor       BLV     Biological limit value       BOD     Biochemical oxygen demand (BOD)       COD     Chemical oxygen demand (COD)       DMEL     Derived Minimal Effect level       DNEL     Derived-No Effect Level       EC-No     European Community number       ECS0     Median effective concentration       EN     European Standard       IARC     International Agency for Research on Cancer       IARA     International Adverse Effect Level       NOBC     Median leftal concentration       LD50     Median leftal concentration       NOAEL     Lowest Observed Adverse Effect Level       NOAEL     No-Observed Adverse Effect Level       NOAEL     No-Observed Effect Concentration       OECD     Organisation for Economic Co-operation and Development       OEL     Occupational Exposure Limit       PNEC     Predicted No-Effect	ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
BCF         Biooncentration factor           BLV         Biological limit value           BOD         Biochemical oxygen demand (BOD)           CCD         Chemical oxygen demand (COD)           DMEL         Derived Niminal Effect level           DNEL         Derived Niminal Effect level           DNEL         Derived No Effect Level           EC-No.         European Community number           EC50         Median effective concentration           EN         European Standard           IARC         International Agency for Research on Cancer           IATA         International Agency for Research on Cancer           IATA         International Agency for Research on Cancer           IDS0         Median lethal concentration           LD50         Median lethal concentration           LD50         Median lethal dose           LOAEL         Lowest Observed Adverse Effect Concentration           NOAEL         No-Observed Adverse Effect Concentration           NOAEL         No-Observed Adverse Effect Concentration           OECD         Organisation for Economic Co-operation and Development           OEL         Occupational Exposure Limit           PBT         Persistent Bioaccumulative Toxic           PNEC         Safely Dala Sh	ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BLV         Biological limit value           BDD         Biochemical oxygen demand (BOD)           CDD         Chemical oxygen demand (COD)           DMEL         Derived Minimal Effect level           DNEL         Derived-No Effect Level           EC-No.         European Community number           ECS0         Median effective concentration           EN         European Community number           ECS0         Median effective concentration           IARC         International Agency for Research on Cancer           IARA         International Agency for Research on Cancer           IARA         International Maritime Dangerous Goods           LCS0         Median effect concentration           LDS0         Median lethal dose           LOAEL         Lowest Observed Adverse Effect Level           NOAEC         No-Observed Adverse Effect Concentration           NOAEC         No-Observed Effect Concentration           OECD         Organisation for Economic Co-operation and Development           OEL         Occupational Exposure Limit           PBT         Persistent Bloaccumulative Toxic           PNEC         Prediced No-Effect Concentration           SDS         Sevage tratemet plant           ThOD         Regulations concentin	ATE	Acute Toxicity Estimate
Bon         Biochemical oxygen demand (BOD)           COD         Chemical oxygen demand (COD)           DMEL         Derived Minimal Effect level           DNEL         Derived-No Effect Level           EC-No.         European Community number           EC50         Median effective concentration           EN         European Standard           IARC         International Agency for Research on Cancer           IARA         International Maritime Dangerous Goods           LCS0         Median lethal concentration           NOAEC         No-Observed Adverse Effect Concentration           NOAEC         No-Observed Adverse Effect Level           NOEC         Occupational Exposure Limit           PBT         Persistent Bioacumulative Toxi	BCF	Bioconcentration factor
CODChemical oxygen demand (COD)DMELDerived Minimal Effect levelDNELDerived-No Effect LevelEC-No.European Community numberEC50Median effective concentrationENEuropean StandardIARCInternational Agency for Research on CancerIATAInternational Agency for Research on CancerIATAInternational Air Transport AssociationINDGInternational Maritime Dangerous GoodsLC50Median lethal concentrationLD50Median lethal concentrationLD51Lowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAECOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	BLV	Biological limit value
DMELDerived Minimal Effect levelDNELDerived-No Effect LevelEC-No.European Community numberEC50Median effective concentrationENEuropean StandardIARCInternational Agency for Research on CancerIATAInternational Agency for Research on CancerIATAInternational Air Transport AssociationINDGInternational Maritime Dangerous GoodsLC50Median lethal concentrationLD50Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAELNo-Observed Adverse Effect LevelNOAELNo-Observed Effect ConcentrationNOAELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCValtalie Organic CompoundsCAS-No.Chemical Abstract Service number	BOD	Biochemical oxygen demand (BOD)
DNELDerived-No Effect LevelEC-No.European Community numberEC50Median effective concentrationENEuropean StandardIARCInternational Agency for Research on CancerIATAInternational Ari Transport AssociationIMDGInternational Ari Transport AssociationIADGMedian lethal concentrationLS00Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect ConcentrationNOAELNo-Observed Adverse Effect LevelNOAELNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersitent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCValuite Organic CompoundsCaS-No.Chemical Abstract Service number	COD	Chemical oxygen demand (COD)
EC-No.European Community numberECS0Median effective concentrationENEuropean StandardIARCInternational Agency for Research on CancerIATAInternational Agency for Research on CancerIATAInternational Alir Transport AssociationIMDGInternational Maritime Dangerous GoodsLC50Median lethal concentrationLD50Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOECOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSwage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCValdile Organic CompoundsCAS-No.Chemical Abstract Service number	DMEL	Derived Minimal Effect level
ECS0Median effective concentrationENEuropean StandardIARCInternational Agency for Research on CancerIATAInternational Air Transport AssociationIMDGInternational Maritime Dangerous GoodsLCS0Median lethal concentrationLDS0Median lethal concentrationLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAELNo-Observed Adverse Effect LevelNOAELOcupational Kertse Effect LevelNOAELOrganisation for Economic Co-operation and DevelopmentOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	DNEL	Derived-No Effect Level
ENEuropean StandardIARCInternational Agency for Research on CancerIATAInternational Air Transport AssociationIMDGInternational Air Transport AssociationIMDGInternational Maritime Dangerous GoodsLCS0Median lethal concentrationLDS0Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAELNo-Observed Adverse Effect LevelNOAELNo-Observed Adverse Effect LevelNOAELOrganisation for Economic Co-operation and DevelopmentOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	EC-No.	European Community number
IARCInternational Agency for Research on CancerIATAInternational Air Transport AssociationIMDGInternational Maritime Dangerous GoodsLC50Median lethal concentrationLD50Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect ConcentrationNOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No,Chemical Abstract Service number	EC50	Median effective concentration
IATAInternational Air Transport AssociationIMDGInternational Maritime Dangerous GoodsLC50Median lethal concentrationLD50Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect ConcentrationNOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	EN	European Standard
IMDGInternational Maritime Dangerous GoodsLC50Median lethal concentrationLD50Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect ConcentrationNOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	IARC	International Agency for Research on Cancer
LC50Median lethal concentrationLD50Median lethal doseLOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	ΙΑΤΑ	International Air Transport Association
LD50Median lethal doseLD50Lowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect ConcentrationNOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	IMDG	International Maritime Dangerous Goods
LOAELLowest Observed Adverse Effect LevelNOAECNo-Observed Adverse Effect LevelNOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	LC50	Median lethal concentration
NOAECNo-Observed Adverse Effect ConcentrationNOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	LD50	Median lethal dose
NOAELNo-Observed Adverse Effect LevelNOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	LOAEL	Lowest Observed Adverse Effect Level
NOECNo-Observed Effect ConcentrationOECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	NOAEC	No-Observed Adverse Effect Concentration
OECDOrganisation for Economic Co-operation and DevelopmentOELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	NOAEL	No-Observed Adverse Effect Level
OELOccupational Exposure LimitPBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	NOEC	No-Observed Effect Concentration
PBTPersistent Bioaccumulative ToxicPNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	OECD	Organisation for Economic Co-operation and Development
PNECPredicted No-Effect ConcentrationRIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	OEL	Occupational Exposure Limit
RIDRegulations concerning the International Carriage of Dangerous Goods by RailSDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	РВТ	Persistent Bioaccumulative Toxic
SDSSafety Data SheetSTPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	PNEC	Predicted No-Effect Concentration
STPSewage treatment plantThODTheoretical oxygen demand (ThOD)TLMMedian Tolerance LimitVOCVolatile Organic CompoundsCAS-No.Chemical Abstract Service number	RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
ThOD     Theoretical oxygen demand (ThOD)       TLM     Median Tolerance Limit       VOC     Volatile Organic Compounds       CAS-No.     Chemical Abstract Service number	SDS	Safety Data Sheet
TLM     Median Tolerance Limit       VOC     Volatile Organic Compounds       CAS-No.     Chemical Abstract Service number	STP	Sewage treatment plant
VOC     Volatile Organic Compounds       CAS-No.     Chemical Abstract Service number	ThOD	Theoretical oxygen demand (ThOD)
CAS-No. Chemical Abstract Service number	TLM	Median Tolerance Limit
	VOC	Volatile Organic Compounds
N O S Not Otherwise Specified	CAS-No.	Chemical Abstract Service number
	N.O.S.	Not Otherwise Specified

## Safety Data Sheet

according to Regulation (EU) 2015/830

Abbreviations and acronyms:		
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

#### Full text of H- and EUH-statements: Aquatic Chronic 2 Hazardous to the aquatic environment - Chronic Hazard, Category 2 Carc. 1B Carcinogenicity, Category 1B H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H350 May cause cancer. H411 Toxic to aquatic life with long lasting effects. Muta. 2 Germ cell mutagenicity, Category 2 Skin Sens. 1 Skin sensitisation, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.