

#### Ferdinand Bilstein GmbH + Co. KG

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

#### **Product identifier**

febi 104912 Engine Oil SAE 10W-30 **Article number: 104912, 104913** 

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

1.2.1 Relevant uses

Engine oil

1.2.2 Uses advised against

None known.

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

Company Ferdinand Bilstein GmbH + Co. KG

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Address enquiries to

**Technical information** info@febi.com Safety Data Sheet info@febi.com

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

#### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Eye Irrit. 2: H319 Causes serious eye irritation.

Skin Sens. 1B: H317 May cause an allergic skin reaction.

Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms

Signal word WARNING

Contains: Calcium long chain alkyl aryl sulfonate Hazard statements H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

P501 Dispose of contents / container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

2.3 Other hazards

> Human health dangers Frequent persistent contact with the skin can cause skin irritation.

**Environmental hazards** Does not contain any PBT or vPvB substances.

Other hazards none



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

#### Product-type:

3.2 The product is a mixture.

Range [%]	Substance
5 - < 15	Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract)
	CAS: 64742-54-7, EINECS/ELINCS: 265-157-1, EU-INDEX: 649-467-00-8, Reg-No.: 01-2119484627-25-XXXX
	GHS/CLP: Asp. Tox. 1: H304
1 - < 2.5	Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts
	CAS: 68784-31-6, EINECS/ELINCS: 272-238-5, Reg-No.: 01-2119657973-23-XXXX
	GHS/CLP: Eye Dam. 1: H318 - Aquatic Chronic 2: H411
1 - < 2.5	Bis(nonylphenyl)amine
	CAS: 36878-20-3, EINECS/ELINCS: 253-249-4, Reg-No.: 01-2119488911-28-XXXX
	GHS/CLP: Aquatic Chronic 4: H413
1 - < 2.5	Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased
	CAS: 68784-26-9, Reg-No.: 01-2119524004-56-XXXX
	GHS/CLP: Aquatic Chronic 4: H413
1 - < 2.5	Calcium long chain alkyl aryl sulfonate
	CAS: 722503-68-6, EINECS/ELINCS: 682-816-2
	GHS/CLP: Skin Sens. 1B: H317
0.1 - < 0.3	Phenol, dodecyl-, branched
	CAS: 121158-58-5, EINECS/ELINCS: 310-154-3, EU-INDEX: 604-092-00-9, Reg-No.: 01-2119513207-49-XXXX
	GHS/CLP: Skin Corr. 1C: H314 - Repr. 1B: H360 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410 - Eye Dam. 1: H318, M = 10

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.

For full text of H-statements: see SECTION 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

**General information** Take off contaminated clothing and wash before reuse.

**Inhalation** Ensure supply of fresh air.

In the event of symptoms seek medical treatment.

**Skin contact** In case of contact with skin wash off immediately with soap and water.

Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

**Ingestion** Consult a doctor immediately.

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

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

No information available.

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

Treat symptomatically.

Forward this sheet to the doctor.

#### **SECTION 5: Fire-fighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media foam, dry powder, water spray jet, carbon dioxide

Extinguishing media that must not

be used

Full water jet



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

Not combusted hydrocarbons.

Risk of formation of toxic pyrolysis products.

Carbon monoxide (CO)

#### 5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within

the local regulations.

#### **SECTION 6: Accidental release measures**

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

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

Forms slippery surfaces with water.

#### 6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).

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

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

Take up with absorbent material (e.g. general-purpose binder). Dispose of absorbed material in accordance within the regulations.

#### 6.4 Reference to other sections

See SECTION 8+13

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid formation of aerosols.

Do not smoke.

Fire class (DIN EN 2): B

Do not eat, drink or smoke when using this product.

Use barrier skin cream.

Wash hands before breaks and after work.

Cloths contaminated with product should not be kept in trouser pockets. Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash before reuse.

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

Keep only in original container. Prevent penetration into the ground.

Do not store together with oxidizing agents.

Keep container tightly closed.

Keep container in a well-ventilated place.

#### 7.3 Specific end use(s)

See product use, SECTION 1.2



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#### SECTION 8: Exposure controls / personal protection

#### 8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

#### **DNEL**

Substance		
Phenol, dodecyl-, branched, CAS: 121158-58-5		
Industrial, dermal, Acute - systemic effects: 166 mg/kg bw.		
Industrial, dermal, Long-term - systemic effects: 0,25 mg/kg bw.		
Industrial, inhalative (mist), Acute - systemic effects: 44,18 mg/m³.		
general population, inhalative (mist), Acute - systemic effects: 13,26 mg/m³.		
general population, oral, Long-term - systemic effects: 0,075 mg/kg bw.		
general population, dermal, Acute - systemic effects: 50 mg/kg bw.		
general population, dermal, Long-term - systemic effects: 0,075 mg/kg bw.		
general population, inhalative (mist), Long-term - systemic effects: 0,79 mg/m³.		
Bis(nonylphenyl)amine, CAS: 36878-20-3		
Industrial, dermal, Long-term - systemic effects: 5 mg/kg bw/day.		
general population, dermal, Long-term - systemic effects: 2,5 mg/kg bw/day.		
general population, oral, Long-term - systemic effects: 0,25 mg/kg bw/day.		
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7		
Industrial, inhalative, Long-term - systemic effects: 2,7 mg/m³.		
Industrial, inhalative, Long-term - local effects: 5,6 mg/m³.		
Industrial, dermal, Long-term - systemic effects: 1 mg/kg bw/day.		
general population, oral, Long-term - systemic effects: 0,74 mg/kg bw/day.		
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6		
Industrial, dermal, Acute - systemic effects: 100 mg/kg bw/d.		
Industrial, inhalative, Long-term - systemic effects: 2,93 mg/m³.		
Industrial, inhalative, Acute - systemic effects: 496,4 mg/m³.		
Industrial, dermal, Long-term - systemic effects: 10,42 mg/kg bw/d.		
general population, dermal, Acute - systemic effects: 50 mg/kg bw/d.		
general population, inhalative, Acute - systemic effects: 11,75 mg/m³.		
general population, dermal, Long-term - systemic effects: 2,1 mg/kg bw/d.		
general population, oral, Long-term - systemic effects: 0,21 mg/kg bw/d.		
general population, oral, Acute - systemic effects: 29 mg/kg bw/d.		
general population, inhalative, Acute - systemic effects: 198,6 mg/m³.		
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased, CAS: 68784-26-9		
Industrial, inhalative, Long-term - systemic effects: 3,5 mg/m³.		
Industrial, inhalative, Acute - systemic effects: 133,6 mg/m³.		
Industrial, dermal, Long-term - systemic effects: 0,5 mg/kg bw/day.		
Industrial, dermal, Acute - systemic effects: 80 mg/kg bw/day.		
general population, oral, Acute - systemic effects: 50 mg/kg bw/day.		
general population, inhalative, Long-term - systemic effects: 0,87 mg/m³.		
general population, inhalative, Acute - systemic effects: 0,067 mg/m³.		
general population, dermal, Long-term - systemic effects: 0,25 mg/kg bw/day.		
general population, dermal, Acute - systemic effects: 0,40 mg/kg bw/day.		
general population, oral, Long-term - systemic effects: 0,25 mg/kg bw/day.		



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#### **PNEC**

Substance		
Phenol, dodecyl-, branched, CAS: 121158-58-5		
oral (food), 4 mg/kg.		
soil, 0,188 mg/kg.		
seawater, 0,0000074 mg/l.		
sediment (seawater), 0,0226 mg/kg.		
sediment (freshwater), 0,226 mg/kg.		
freshwater, 0,000074 mg/l.		
Bis(nonylphenyl)amine, CAS: 36878-20-3		
seawater, 0,01 mg/l.		
sewage treatment plants (STP), 1 mg/l.		
sediment (freshwater), 132000 mg/kg.		
sediment (seawater), 13200 mg/kg.		
soil, 263000 mg/kg.		
freshwater, 0,1 mg/l.		
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7		
oral (food), 9,33 mg/kg.		
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6		
freshwater, 0,0040 mg/l.		
sediment (seawater), 0,00701 mg/l.		
sediment (freshwater), 0,0701 mg/l.		
sewage treatment plants (STP), 3,8 mg/l.		
soil, 0,0548 mg/kg.		
oral (food), 8,33 mg/kg.		
seawater, 0,0046 mg/l.		
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased, CAS: 68784-26-9		
oral (food), 13333 mg/kg.		
freshwater, 0,5 mg/l.		
sediment (seawater), 0,04 mg/l.		
sewage treatment plants (STP), 100 mg/l.		
sediment (freshwater), 43500 mg/kg.		
sediment (seawater), 3480 mg/kg.		
soil, 8850 mg/kg.		

# ebi bilstein

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#### 8.2 Exposure controls

Additional advice on system design 

Ensure adequate ventilation on workstation.

Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of

hazardous substances.

General exposure limit for oil mist should be noted.

**Eye protection** If there is a risk of splashing:

safety glasses

Hand protection The details concerned are recommendations. Please contact the glove supplier for further

information.

> 0,4 mm; Nitrile rubber, >480 min (EN 374-1/-2/-3).

Skin protection light protective clothing

Other Personal protective equipment should be selected specifically for the working place,

depending on concentration and quantity handled. The resistance of this equipment to

chemicals should be ascertained with the respective supplier.

Avoid contact with eyes and skin.

**Respiratory protection** Breathing apparatus in the event of aerosol or mist formation.

Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)

Thermal hazards none

Delimitation and monitoring of the

environmental exposition

Comply with applicable environmental regulations limiting discharge to air, water and soil.

#### **SECTION 9: Physical and chemical properties**

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

Form liquid

Color brown

Odor characteristic

Odour threshold not applicable

pH-value not applicable

pH-value [1%] not applicableBoiling point [°C] No information available.

Flash point [°C] > 200 (ISO 2592)

Flammability (solid, gas) [°C] No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Oxidising properties no

Vapour pressure/gas pressure [kPa] No information available.

**Density [g/ml]** 0,86 (DIN 51757) (15 °C / 59,0 °F)

Bulk density [kg/m³] not applicable
Solubility in water immiscible

Partition coefficient [n-octanol/water] No information available.

Viscosity > 20,5 mm²/s (40° C)

11,9 mm<sup>2</sup>/s (100°C) (DIN 51562/T1)

Relative vapour density determined

in air

No information available.

Evaporation speed

Melting point [°C]

Autoignition temperature [°C]

No information available.

No information available.

No information available.

No information available.

#### 9.2 Other information

none



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#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No dangerous reactions known if used as directed.

#### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

#### 10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

#### 10.4 Conditions to avoid

Strong heating.

#### 10.5 Incompatible materials

Oxidizing agent

#### 10.6 Hazardous decomposition products

No hazardous decomposition products known.



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#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

**Acute toxicity** 

Product

inhalative, Based on the available information, the classification criteria are not fulfilled.:

dermal, Based on the available information, the classification criteria are not fulfilled.:

oral, Based on the available information, the classification criteria are not fulfilled .:

Substance

Phenol, dodecyl-, branched, CAS: 121158-58-5

LD50, dermal, Rabbit: 15000 mg/kg bw.

LD50, oral, Rat: 2100 mg/kg bw.

Bis(nonylphenyl)amine, CAS: 36878-20-3

LD50, dermal, Rat: >2000 mg/kg (OECD 402).

LD50, oral, Rat: >5000 mg/kg (OECD 401).

Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7

LD50, dermal, Rabbit: > 2000 mg/kg.

LD50, oral, Rat: > 5000 mg/kg.

LC50, dermal, Rat: 2,18 mg/l.

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6

LD50, dermal, Rabbit: >5000 mg/kg bw.

LD50, oral, Rat: 2750 mg/kg bw.

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased, CAS: 68784-26-9

LD50, dermal, Rabbit: >4000 mg/kg bw.

LD50, oral, Rat: >5000 mg/kg bw.

LC50, inhalative, Rat: >1,67 mg/l.

Serious eye damage/irritation Toxicological data of complete product are not available.

Irritant

Calculation method

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

**Respiratory or skin sensitisation**Toxicological data of complete product are not available.

May cause an allergic skin reaction.

Calculation method

Specific target organ toxicity —

single exposure

Based on the available information, the classification criteria are not fulfilled.

Specific target organ toxicity —

repeated exposure

Based on the available information, the classification criteria are not fulfilled.

Mutagenicity Based on the available information, the classification criteria are not fulfilled.

**Reproduction toxicity**Based on the available information, the classification criteria are not fulfilled. **Carcinogenicity**Based on the available information, the classification criteria are not fulfilled.

**Aspiration hazard**Based on the available information, the classification criteria are not fulfilled.

On basis of test data

**General remarks** Frequent persistent contact with the skin can cause skin irritation.

Toxicological data of complete product are not available.

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.



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#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Substance		
Phenol, dodecyl-, branched, CAS: 121158-58-5		
EC50, (72h), Scenedesmus subspicatus: 0,15 mg/l.		
EC50, (21d), Daphnia magna: 0,008 mg/l.		
EC50, (48h), Daphnia magna: 0,037 mg/l.		
EL50, (96h), Pimephales promelas: 40 mg/l.		
Bis(nonylphenyl)amine, CAS: 36878-20-3		
EC50, (48h), Daphnia magna: >100 mg/l (OECD 202).		
LC0, (96h), Brachidanio rerio: 58 mg/l (OECD 203).		
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7		
EL50, (24h), Daphnia magna: > 10000 mg/l.		
NOELR, (14d), Oncorhynchus mykiss: >= 1000 mg/l.		
LL50, (96h), Pimephales promelas: >100 mg/l.		
NOEL, (72h), Pseudokirchneriella subcapitata: >= 100 mg/l.		
NOEL, (21d), Daphnia magna: 10 mg/l.		
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts, CAS: 68784-31-6		
EC50, (16h), Pseudomonas putida: 380 mg/l.		
IC50, (21d), Daphnia magna: >0,8 mg/l.		
EL50, (48h), Daphnia magna: 75 mg/l.		
EL50, (72h), Desmodesmus subspicatus: 410 mg/l.		
NOEC, (21d), Daphnia magna: 0,8 mg/l.		
NOELR, (48h), Daphnia magna: 32 mg/l.		
NOELR, (96h), Oncorhynchus mykiss: 3,2 mg/l.		
LL50, (96h), Oncorhynchus mykiss: 4,4 mg/l.		
EC0, (16h), Pseudomonas putida: 200 mg/l.		
LOEC, (21d), Daphnia magna: 0,8 mg/l.		
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased, CAS: 68784-26-9		
LC50, (96h), Americamysis bahia: >40 mg/l.		
EL50, (48h), Daphnia magna: >1000 mg/l.		
EL50, (96h), Pseudokirchneriella subcapitata: >500 mg/l.		
LL50, (96h), Pimephales promelas: >1000 mg/l.		

#### 12.2 Persistence and degradability

Behaviour in environment not determined

compartments

Behaviour in sewage plant not determined Biological degradability not determined

#### 12.3 Bioaccumulative potential

No information available.

#### 12.4 Mobility in soil

No information available.

#### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

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#### 12.6 Other adverse effects

Ecological data of complete product are not available.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

**Product** 

In according to RoHS!

Coordinate disposal with the disposal contractor/authorities if necessary.

Dispose of as hazardous waste.

Waste no. (recommended)

130205\* mineral-based non-chlorinated engine, gear and lubricating oils

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Packaging that cannot be cleaned should be disposed of as for product.

150110\* Waste no. (recommended)

#### **SECTION 14: Transport information**

#### 14.1 UN number

Transport by land according to

ADR/RID

not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with

**IMDG** 

not applicable

Air transport in accordance with IATA not applicable

#### 14.2 UN proper shipping name

Transport by land according to

ADR/RID

NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

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#### 14.3 Transport hazard class(es)

Transport by land according to

ADR/RID

not applicable

Inland navigation (ADN)

not applicable

Marine transport in accordance with not applicable

**IMDG** 

Air transport in accordance with IATA not applicable

#### 14.4 Packing group

Transport by land according to

not applicable

ADR/RID

Inland navigation (ADN) not applicable

Marine transport in accordance with not applicable

**IMDG** 

Air transport in accordance with IATA not applicable

#### 14.5 Environmental hazards

Transport by land according to

ADR/RID

no

no

Inland navigation (ADN)

Marine transport in accordance with no

**IMDG** 

Air transport in accordance with IATA no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 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

**EEC-REGULATIONS** 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008;

75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)

**NATIONAL REGULATIONS (GB):** EH40/2005 Workplace exposure limits (Second edition, published December 2011).

- Observe employment restrictions

for people

no

- VOC (2010/75/CE) 0 %

#### 15.2 Chemical safety assessment

not applicable



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#### **SECTION 16: Other information**

### 16.1 Hazard statements (SECTION 03)

H410 Very toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

H360 May damage fertility or the unborn child. H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.

H318 Causes serious eye damage.

H413 May cause long lasting harmful effects to aquatic life.

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

#### 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

ATE = acute toxicity estimate

CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging

DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECR = European Chamicals Bureau

ECB = European Chemicals Bureau EEC = European Economic Community

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified Chemical Substances

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC-Code = International Code for the Construction and Equipment of Ships carrying

Dangerous Chemicals in Bulk IC50 = Inhibition concentration, 50%

IMDG = International Maritime Code for Dangerous Goods IUCLID = International Uniform ChemicaL Information Database

LC50 = Lethal concentration, 50% LD50 = Median lethal dose

LC0 = lethal concentration, 0% LOAEL = lowest-observed-adverse-effect level

MARPOL = International Convention for the Prevention of Marine Pollution from Ships

NOAEL = No Observed Adverse Effect Level NOEC = No Observed Effect Concentration

PBT = Persistent, Bioaccumulative and Toxic substance

PNEC = Predicted No-Effect Concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

STP = Sewage Treatment Plant

$$\label{eq:two_state} \begin{split} &\text{TLV} \&\text{/TWA} = \text{Threshold limit value} - \text{time-weighted average} \\ &\text{TLV} \&\text{STEL} = \text{Threshold limit value} - \text{short-time exposure limit} \end{split}$$

VOC = Volatile Organic Compounds

vPvB = very Persistent and very Bioaccumulative

#### 16.3 Other information

Classification procedure Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)

Skin Sens. 1B: H317 May cause an allergic skin reaction. (Calculation method)

Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)

Modified position none