

SWAG Autoteile GmbH  
42117 Wuppertal

Date printed 16.08.2024, Revision 16.08.2024

Version 1.0 Page 1 / 12

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

### 1.1 Product identifier

**Engine Oil 5W-30**  
**Article number: 50 10 1150, 50 10 1151, 50 10 1152, 50 10 1153, 50 10 1154**

### 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.

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

**Company** SWAG Autoteile GmbH  
Am Kiesberg 4-6  
42117 Wuppertal / GERMANY  
Phone +49 (0)202 26454-0  
Fax +49 (0)202 26454-5000  
Homepage [www.swag.de](http://www.swag.de)  
E-mail [info@swag.de](mailto:info@swag.de)

#### Address enquiries to

**Technical information** [info@swag.de](mailto:info@swag.de)

**Safety Data Sheet** [info@swag.de](mailto:info@swag.de)

### 1.4 Emergency telephone number

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

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

No classification.

### 2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

**Hazard pictograms** none

**Signal word** none

**Hazard statements** none

**Precautionary statements** none

**Special labelling** EUH210 Safety data sheet available on request.

Contains: Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts. EUH208 May produce an allergic reaction.

### 2.3 Other hazards

**Environmental hazards** Does not contain any PBT or vPvB substances.  
Contains no ingredients with endocrine-disrupting properties.

**Other hazards** No particular hazards known.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

The product is a mixture.

Range [%]	Substance
30 - < 60	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(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts
	CAS: 85940-28-9, EINECS/ELINCS: 288-917-4, Reg-No.: 01-2119521201-61-XXXX
	GHS/CLP: Eye Dam. 1: H318 - Skin Irrit. 2: H315 - Aquatic Chronic 2: H411 SCL [%]: 15 - <20: Eye Irrit. 2: H319, 20 - 100: Eye Dam. 1: H318, 15 - 100: Skin Irrit. 2: H315
0,3 - < 1	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts
	CAS: 70024-69-0, EINECS/ELINCS: 274-263-7, Reg-No.: 01-2119492616-28-XXXX
	GHS/CLP: Skin Sens. 1B: H317 SCL [%]: 10 - 100: Skin Sens. 1B: H317

#### Comment on component parts

For full text of H-statements: see SECTION 16.  
Contains less than 3% w/w DMSO-extract (only for mineral oils)

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>General information</b>	Take off contaminated clothing and wash before reuse.
<b>Inhalation</b>	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
<b>Skin contact</b>	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
<b>Eye contact</b>	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.
<b>Ingestion</b>	Do not induce vomiting. Seek medical advice immediately.

### 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 your doctor.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Foam, dry powder, water spray jet, carbon dioxide.
<b>Extinguishing media that must not be used</b>	Full water jet.

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

Risk of formation of toxic pyrolysis products.  
Carbon monoxide (CO)  
Sulphur oxides (SO<sub>x</sub>).  
Nitrogen oxides (NO<sub>x</sub>).

### 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.

Cool containers at risk with water spray jet.

## SECTION 6: Accidental release measures

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

Some risk of slipping due to 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.  
Do not discharge into the subsoil/soil.

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

Take up with absorbent material (e.g. oil 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.  
Use only in well-ventilated areas.  
Keep away from all sources of ignition - Refrain from smoking.  
Do not eat, drink or smoke when using this product.  
After worktime and before work breaks the affected skin areas must be thoroughly cleaned.  
Use barrier skin cream.  
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 food and animal food/diet.  
Keep container in a well-ventilated place.  
Keep container tightly closed.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (UK)

not relevant

#### Ingredients with occupational exposure limits to be monitored EU (2004/37/EG)

not relevant

#### DNEL

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
Industrial, inhalative, Long-term - systemic effects, 2.73 mg/m <sup>3</sup>
Industrial, inhalative, Long-term - local effects, 5.58 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 970 µg/kg bw/day
general population, inhalative, Long-term - local effects, 1.19 mg/m <sup>3</sup>
general population, oral, Long-term - systemic effects, 740 µg/kg bw/day
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
Industrial, inhalative, Long-term - systemic effects, 6,6 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 9,6 mg/kg bw/d
general population, inhalative, Long-term - systemic effects, 1,67 mg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 4,8 mg/kg bw/d
general population, oral, Long-term - systemic effects, 0,19 mg/kg bw/d
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
Industrial, inhalative, Long-term - systemic effects, 11,75 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 3,33 mg/kg bw/day
Industrial, dermal, Long-term - local effects, 1,03 mg/cm <sup>2</sup>
general population, inhalative, Long-term - systemic effects, 2,9 mg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 1,667 mg/kg bw/day
general population, dermal, Long-term - local effects, 0,513 mg/cm <sup>2</sup>
general population, oral, Long-term - systemic effects, 0,833 mg/kg bw/day

#### PNEC

Substance
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(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
freshwater, 0,002 mg/l (AF=1000)
seawater, 0,0002 mg/l (AF=10000)
sewage treatment plants (STP), 100 mg/l (AF=100)
sediment (freshwater), 19,3 mg/kg dw
sediment (seawater), 1,93 mg/kg dw
soil, 15,7 mg/kg dw
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
freshwater, 1 mg/l
seawater, 1 mg/l
sewage treatment plants (STP), 1000 mg/l
oral (food), 16.667 mg/kg food

SWAG Autoteile GmbH  
42117 Wuppertal

Date printed 16.08.2024, Revision 16.08.2024

Version 1.0 Page 5 / 12

## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. Nitrile rubber, >120 min (EN 374-1/-2/-3).
<b>Skin protection</b>	light protective clothing
<b>Other</b>	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. Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin.
<b>Respiratory protection</b>	Not required under normal conditions.
<b>Thermal hazards</b>	No information available.
<b>Delimitation and monitoring of the environmental exposition</b>	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

<b>Physical state</b>	liquid
<b>Form</b>	liquid
<b>Color</b>	light brown
<b>Odor</b>	characteristic
<b>Odour threshold</b>	No information available.
<b>pH-value</b>	No information available.
<b>pH-value [1%]</b>	No information available.
<b>Boiling point or initial boiling point and boiling range [°C]</b>	not applicable
<b>Flash point [°C]</b>	~234
<b>Flammability</b>	No information available.
<b>Lower explosion limit</b>	not applicable
<b>Upper explosion limit</b>	not applicable
<b>Oxidising properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	No information available.
<b>Density [g/cm³]</b>	0,856 (15 °C / 59,0 °F)
<b>Relative density</b>	not determined
<b>Bulk density [kg/m³]</b>	not applicable
<b>Solubility in water</b>	virtually insoluble
<b>Solubility other solvents</b>	No information available.
<b>Partition coefficient n-octanol/water (log value)</b>	No information available.
<b>Kinematic viscosity</b>	10,2 mm²/s (100°C)
<b>Relative vapour density</b>	No information available.
<b>Melting point [°C]</b>	No information available.
<b>Auto-ignition temperature [°C]</b>	not applicable
<b>Decomposition temperature [°C]</b>	No information available.
<b>Particle characteristics</b>	No information available.

### 9.2 Other information

Pour point: -33°C

## **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 acids, alkalies and oxidizing agents.

### **10.4 Conditions to avoid**

Strong heating.

### **10.5 Incompatible materials**

Strong oxidizing agent.  
Strong acids.

### **10.6 Hazardous decomposition products**

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute oral toxicity

Product
Based on the available information, the classification criteria are not fulfilled.
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, oral, Rat, 5000 mg/kg bw
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
LD50, oral, Rat, 3080 mg/kg bw
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
LD50, oral, Rat, 10.000 - 20.000 mg/kg

#### Acute dermal toxicity

Product
Based on the available information, the classification criteria are not fulfilled.
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, dermal, Rabbit, 2000 - 5 00 mg/kg bw
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
LD50, dermal, Rabbit, 20000 mg/kg bw
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
LD50, dermal, Rabbit, > 5.000 mg/kg (OECD 402)

#### Acute inhalational toxicity

Product
Based on the available information, the classification criteria are not fulfilled.
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LC50, inhalative, Rat, 2.18 - 5.53 mg/L air, 4h
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
LC50, inhalative, Rat, 2.3 mg/L air, 4h
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
LC50, inhalative, Rat, > 1,9 mg/l

#### Serious eye damage/irritation

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

Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
Eye, Causes serious eye damage.

#### Skin corrosion/irritation

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

Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
dermal, irritant

SWAG Autoteile GmbH  
42117 Wuppertal

Date printed 16.08.2024, Revision 16.08.2024

Version 1.0

Page 8 / 12

**Respiratory or skin sensitisation** Toxicological data of complete product are not available.  
May produce an allergic reaction.  
Calculation method

Substance
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
dermal, non-sensitizing

**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.

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
NOAEL, dermal, Rat, 30 - 2000 mg/kg bw/day
NOAEL, dermal, Rabbit, 1000 mg/kg bw/day
NOAEC, inhalative, Rat, 980 mg/m <sup>3</sup> air
LOAEL, oral, Rat, 125 mg/kg bw/day
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
NOAEL, oral, Rat, 125 mg/kg bw/day
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
NOAEL, oral, Rat, 500 mg/kg bw/day, OECD 407, adverse effect observed
NOAEL, dermal, Rat, 1000 mg/kg bw/day, no adverse effect observed
NOAEC, inhalative, Rat, 881,58 mg/m <sup>3</sup> , OECD 412, adverse effect observed

**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.

**- Fertility**

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
NOAEL, oral, Rat, 1000 mg/kg bw/d (Effect on fertility), no adverse effect observed
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
NOAEL, oral, Rat, 500 mg/kg bw/day, OECD 415, no adverse effect observed

**- Development**

Substance
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
NOAEL, oral, Rat, 500 mg/kg bw/day, OECD 415, no adverse effect observed

**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.

**General remarks**

Toxicological data of complete product are not available.

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties** Contains no ingredients with endocrine-disrupting properties.

**11.2.2 Other information** none

## SECTION 12: Ecological information

### 12.1 Toxicity

Product
Based on the available information, the classification criteria are not fulfilled.
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
EL50, (48h), Invertebrates, 10 g/L
NOELR, (14d), Fish, 1 mg/L
LL50, (96h), Invertebrates, 10 g/L
LL50, (96h), Fish, 100 mg/L
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts, CAS: 85940-28-9
EC50, (48h), Invertebrates, 5.4 mg/L
EC50, (96h), Algae, 2 - 2.1 mg/L
NOEC, (21d), Invertebrates, 400 - 800 µg/L
LL50, (96h), Oncorhynchus mykiss, 4,5 mg/l
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts, CAS: 70024-69-0
LC50, (96h), Fish, > 10.000 mg/l (OECD 203)
EC50, (48h), Daphnia magna, > 1000 mg/l
EC50, (72h), Pseudokirchneriella subcapitata, > 1000 mg/l

### 12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not determined

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

### 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.

### 12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

### 12.7 Other adverse effects

Ecological data of complete product are not available.

Do not discharge product unmonitored into the environment or into the drainage.

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

SWAG Autoteile GmbH  
42117 Wuppertal

Date printed 16.08.2024, Revision 16.08.2024

Version 1.0 Page 10 / 12

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. 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

Coordinate disposal with the authorities if necessary.

#### 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.

#### Waste no. (recommended)

150110\* packaging containing residues of or contaminated by hazardous substances

## SECTION 14: Transport information

### 14.1 UN number or ID 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 IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

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

### 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 IMDG not applicable

Air transport in accordance with IATA not applicable

SWAG Autoteile GmbH  
42117 Wuppertal

Date printed 16.08.2024, Revision 16.08.2024

Version 1.0 Page 11 / 12

#### 14.4 Packing group

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

#### 14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

#### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

#### 14.7 Maritime transport in bulk according to IMO instruments

not applicable

### SECTION 15: Regulatory information

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

<b>EEC-REGULATIONS</b>	2008/98/EG (2000/532/EC ); 2010/75/EU; 2004/42/EG; (EG) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EWG ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014; (EU) 2019/1148; (EU) 2019/1021, (EU) 2023/707
- Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
- Annex XIV (REACH)	According to Annex XIV of Regulation (EC) 1907/2006 (REACH) the product does not contain any substances $\geq 0.1\%$ that are subject to authorisation.
- Annex XVII (REACH)	According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product contains $\geq 0.1\%$ of substances with the following restrictions. 75 According to Annex XVII of Regulation (EC) 1907/2006 (REACH) the product is not subject to any restrictions.
<b>TRANSPORT-REGULATIONS</b>	ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)
<b>NATIONAL REGULATIONS (UK):</b>	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
- Observe employment restrictions for people	not applicable
- VOC (2010/75/CE)	not relevant

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 3)

H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H411 Toxic to aquatic life with long lasting effects.  
H315 Causes skin irritation.  
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  
ECB = European Chemicals Bureau  
EEC = European Economic Community  
EINECS = European Inventory of Existing Commercial Chemical Substances  
EL50 = Median effective loading  
ELINCS = European List of Notified Chemical Substances  
EmS = Emergency Schedules  
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  
IVIS = In vitro irritation score  
LC50 = Lethal concentration, 50%  
LD50 = Median lethal dose  
LC0 = lethal concentration, 0%  
LOAEL = lowest-observed-adverse-effect level  
LL50 = Median lethal loading  
LQ = Limited Quantities  
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  
TLV@/TWA = Threshold limit value – time-weighted average  
TLV@STEL = Threshold limit value – short-time exposure limit  
VOC = Volatile Organic Compounds  
vPvB = very Persistent and very Bioaccumulative

### 16.3 Other information

Classification procedure

Modified position none