

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

### 1.1 Product identifier

**Engine Oil 5W-30**  
**Article number: 101150, 101151, 101152, 101153, 101154**

### 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** Ferdinand Bilstein GmbH + Co. KG  
Wilhelmstr. 47  
58256 Ennepetal / GERMANY  
Phone +49 2333 911-0  
Fax +49 2333 911-444  
Homepage [www.febi.com](http://www.febi.com)  
E-mail [info@febi.com](mailto:info@febi.com)

#### Address enquiries to

**Technical information** [info@febi.com](mailto:info@febi.com)

**Safety Data Sheet** [info@febi.com](mailto:info@febi.com)

### 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

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

### 2.2 Label elements

The product is classified as hazardous in accordance to OSHA Standard 29 CFR 1910.1200 (HCS 2012)

#### Hazard pictograms



#### Signal word

WARNING

#### Contains:

C14-16-18 Alkyl phenol, CAS: 1190625-94-5

#### Hazard statements

H317 May cause an allergic skin reaction.

#### 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.  
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.

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**2.3 Other hazards**

<b>Physico-chemical hazards</b>	No particular hazards known.
<b>Human health dangers</b>	Frequent persistent contact with the skin can cause skin irritation.
<b>Environmental hazards</b>	Does not contain any PBT or vPvB substances. Contains no ingredients with endocrine-disrupting properties.
<b>Other hazards</b>	Further hazards were not determined with the current level of knowledge.  This product is classified as non-hazardous in accordance to OSHA Standard 29 CFR 1910.1200.

**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
1 - < 2,5	Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) CAS: 93819-94-4
1 - < 2,5	C14-16-18 Alkyl phenol CAS: 1190625-94-5
1 - < 2,5	Bis(nonylphenyl)amine CAS: 36878-20-3
1 - < 2,5	Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt) CAS: 64742-65-0
1 - < 2,5	Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract) CAS: 64742-56-9

**Comment on component parts** For full text of H-statements and R-phrases: see SECTION 16.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

<b>General information</b>	Change soaked clothing.
<b>Inhalation</b>	Ensure supply of fresh air. In the event of symptoms seek medical treatment.
<b>Skin contact</b>	In case of contact with skin wash off immediately 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>	Consult a doctor immediately. Rinse out mouth and give plenty of water to drink. Do not induce vomiting.

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

If swallowed or in the event of vomiting, risk of product entering the lungs.

**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

<b>Suitable extinguishing media</b>	Fire extinguishing method of surrounding areas must be considered. 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>).  
Hydrogen sulfide ((H<sub>2</sub>S).

### 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.  
Ensure adequate ventilation.  
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

### 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  
  
Wash hands before breaks and after work.  
Do not eat, drink or smoke when using this product.  
Use barrier skin cream.  
Take off contaminated clothing and wash before reuse.  
Cloths contaminated with product should not be kept in trouser pockets.



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**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.

Do not store together with food and animal food/diet.

Keep container tightly closed.

Protect from heat/overheating.

**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 (US)**

Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract)
CAS: 64742-54-7
Long-term exposure: 5 mg/m <sup>3</sup> , OSHA, oil mist

**DNEL**

Substance
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, 2.73 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
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
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, 0,97 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,74 mg/kg bw/day
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
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, oral, Long-term - local effects, 740 µg/kg bw/day
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate), CAS: 93819-94-4
Industrial, inhalative, Long-term - systemic effects, 8,31 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 0,58 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 2,11 mg/m <sup>3</sup>
general population, dermal, Long-term - systemic effects, 0,29 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,24 mg/kg bw/day
C14-16-18 Alkyl phenol, CAS: 1190625-94-5
Industrial, inhalative, Long-term - systemic effects, 1,17 mg/m <sup>3</sup>
Industrial, dermal, Long-term - systemic effects, 300 µg/kg bw/d

**PNEC**

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
freshwater, 412 µg/L
seawater, 41.2 µg/L
sediment (freshwater), 1 mg/kg sediment dw
sediment (seawater), 0.1 mg/kg sediment dw
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7



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oral (food), 9,33 mg/kg
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
oral (food), 9,33 mg/kg food
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
oral (food), 9,33 mg/kg food
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate), CAS: 93819-94-4
freshwater, 0,004 mg/l
seawater, 0,004 mg/l
sewage treatment plants (STP), 100 mg/l
sediment (freshwater), 0,012 mg/kg dw
sediment (seawater), 0,001 mg/kg dw
soil, 0,005 mg/kg
oral (food), 10,67 mg/kg
C14-16-18 Alkyl phenol, CAS: 1190625-94-5
freshwater, 100 µg/l
seawater, 10 µg/l
sewage treatment plants (STP), 100 mg/l
sediment (freshwater), 4266,16 mg/kg dw
sediment (seawater), 426,62 mg/kg dw
soil, 852,58 mg/kg dw
oral (food), 3,3 mg/kg

**8.2 Exposure controls**

<b>Additional advice on system design</b>	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.
<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. > 0,11 mm: Nitrile rubber, >480 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. Avoid contact with eyes and skin.
<b>Respiratory protection</b>	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P1. (DIN EN 14387)
<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

Physical state	Liquid
Form	Liquid
Color	light brown
Odor	characteristic
Odor threshold	No information available.
pH-value	Not applicable
pH-value [1%]	No information available.
Boiling point or initial boiling point and boiling range [°C]	No information available.
Flash point [°C]	>195 (ISO 2592)
Flammability	Not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidizing properties	No
Vapor pressure/gas pressure [kPa]	<0,01 (20°C)
Density [g/cm <sup>3</sup> ]	ca. 0,849 (DIN 51757) (15 °C / 59,0 °F)
Relative density	Not determined
Bulk density [kg/m <sup>3</sup> ]	Not applicable
Solubility in water	virtually insoluble
Solubility other solvents	No information available.
Partition coefficient n-octanol/water (log value)	No information available.
Kinematic viscosity	ca. 10,1 mm <sup>2</sup> /s (100°C) (DIN 51562/T1) >20,5 mm <sup>2</sup> /s (40°C)
Relative vapour density	No information available.
Melting point [°C]	<-36 (DIN ISO 3016)
Auto-ignition temperature [°C]	No information available.
Decomposition temperature [°C]	>65°C
Particle characteristics	No information available.

### 9.2 Other information

Pour point: ca -36°C

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See SECTION 10.3.

### 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 acids

Strong heating, because the thermal decomposition starts from > 65°C.



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### **10.5 Incompatible materials**

Oxidizing agent  
Acids  
Strong basic compounds

### **10.6 Hazardous decomposition products**

In the case of heating following (decomposition) products may occur:  
Hydrogen sulfide ((H<sub>2</sub>S)).



## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute oral toxicity

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

Product
ATE-mix, oral, >2000 mg/kg bw
Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
LD50, oral, Rat, 5000 mg/kg bw
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, oral, Rat, 5000 mg/kg bw
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
LD50, oral, Rat, >5000 mg/kg bw (OECD 401)
NOAEL, oral, Rat, >1000 mg/kg bw (OECD 421)
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
LD50, oral, Rat, 5000 mg/kg bw
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate), CAS: 93819-94-4
LD50, oral, Rat, 2600 mg/kg
C14-16-18 Alkyl phenol, CAS: 1190625-94-5
LD50, oral, Rat (female), >2000 mg/kg bw

#### Acute dermal toxicity

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

Product
ATE-mix, dermal, >2000 mg/kg bw
Substance
Destillates (petroleum), hydrotreated heavy paraffinic (containing < 3% DMSO-extract), CAS: 64742-54-7
LD50, dermal, Rabbit, 2000 - 5 00 mg/kg bw
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
LD50, dermal, Rabbit, >5000 mg/kg bw (OECD 403)
NOAEL, dermal, Rat, >2000 mg/kg bw (OECD 414)
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
LD50, dermal, Rabbit, > 2000 - 5000 mg/kg bw
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate), CAS: 93819-94-4
LD50, dermal, Rabbit, >3160 mg/kg bw/day
C14-16-18 Alkyl phenol, CAS: 1190625-94-5
LD50, dermal, Rat, >2000 mg/kg bw

#### Acute inhalational toxicity

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

Product
ATE-mix, inhalativ (vapor), >20 mg/L
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
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
LC50, inhalative, Rat, >5,53 mg/l air (OECD 403)



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Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
LC50, inhalative, Rat, 2,18 - 5,53 mg/L air 4h, 4h
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate), CAS: 93819-94-4
LC50, inhalative, Rat, >2 mg/l

**Serious eye damage/irritation** No classification due to substance-specific concentration limits.  
CAS 93819-94-4: >10% - <12,5% Eye Irrit. 2

Substance
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
Eye, non-irritating
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
Eye, non-irritating

**Skin corrosion/irritation** Based on the information available, the classification criteria have not been fulfilled.

Substance
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
dermal, non-irritating
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
dermal, non-irritating

**Respiratory or skin sensitisation** May cause an allergic skin reaction.

Substance
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
dermal, non-sensitizing
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
dermal, non-sensitizing

**Specific target organ toxicity — single exposure** Based on the information available, the classification criteria have not been fulfilled.

**Specific target organ toxicity — repeated exposure** Based on the information available, the classification criteria have not been fulfilled.

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
NOEL, oral, Rat, 100 mg/kg bw/day
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
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
NOAEC, inhalative, Rat, 980 mg/m <sup>3</sup> , no adverse effect observed
LOAEL, oral, Rat, 125 mg/kg bw/day, adverse effect observed
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
NOAEL, inhalative, Rat, 980 mg/m <sup>3</sup> air, no adverse effect observed
LOAEL, dermal, mouse, 100 mg/kg bw/day, The effects observed are not sufficient for classification.
LOAEL, oral, Rat, 125 mg/kg bw/day, The effects observed are not sufficient for classification.
C14-16-18 Alkyl phenol, CAS: 1190625-94-5
NOAEL, oral, Rat, 30 - 100 mg/kg bw/day



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**Mutagenicity**

Based on the information available, the classification criteria have not been fulfilled.

Substance
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
in vitro, negativ
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
in vitro, negativ

**Reproduction toxicity**

Based on the information available, the classification criteria have not been 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
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
NOAEL, oral, Rat, 1000 mg/kg bw/day, In vivo study, negativ
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extrakt), CAS: 64742-65-0
NOAEL, oral, Rat, 1000 mg/kg bw/d, no adverse effect observed

**- Development**

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
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
NOAEL, oral, Rat, 1000 mg/kg bw/day, In vivo study, negativ

**Carcinogenicity**

Based on the information available, the classification criteria have not been fulfilled.

**Aspiration hazard**

Based on the information available, the classification criteria have not been fulfilled.

**General remarks**

Toxicological data of complete product are not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Substance
Bis(nonylphenyl)amine, CAS: 36878-20-3
EC50, (48h), Invertebrates, 100 mg/L
EL50, (72h), Algae, 100 mg/L
NOELR, (21d), Invertebrates, 4.45 mg/L
NOELR, (33d), fish, 10 mg/L
Distillates (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
Distillates (petroleum), solvent-dewaxed light paraffinic (containing < 3% DMSO-extract), CAS: 64742-56-9
EL50, (24h), Daphnia magna, >10000 mg/l (OECD 202)
LL50, (96h), Pimephales promelas, >100 mg/l (OECD 203)
NOEL, (21d), Daphnia magna, 10 mg/l (OECD 211)
NOEL, (72h), Pseudokirchneriella subcapitata, >100 mg/l (OECD 201)
Distillates (petroleum), solvent-dewaxed heavy paraffinic (< 3% DMSO Extract), CAS: 64742-65-0
NOELR, (14d), fish, 1 g/L
LL50, (96h), Invertebrates, 10 g/L
LL50, (96h), fish, 100 mg/L
Zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate), CAS: 93819-94-4
EC50, (48h), Daphnia magna, 5,4 mg/l (OECD 202)
EC50, (72h), Selenastrum capricornutum, 2,1 mg/l
EC50, (3h), Activated sludge, >10000 mg/l
IC50, (21d), Daphnia magna, >0,8 mg/l
LL50, (96h), Oncorhynchus mykiss, 4,5 mg/l
C14-16-18 Alkyl phenol, CAS: 1190625-94-5
LC50, (96h), Cyprinus carpio, >100 mg/l
EC50, (24h), Daphnia magna, >100 mg/l
EC50, (72h), Pseudokirchneriella subcapitata, >100 mg/l
NOEC, (72h), Pseudokirchneriella subcapitata, 100 mg/l
NOELR, (24h), Daphnia magna, >100 mg/l

### 12.2 Persistence and degradability

#### Behaviour in environment compartments

#### Behaviour in sewage plant

Can be separated out mechanically in purification plants.

#### Biological degradability

The product is not readily biodegradable.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.



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**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.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Coordinate disposal with the authorities if necessary.

Disposal in an incineration plant in accordance with the regulations of the local authorities.

In according to RoHS!

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.

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

**RCRA Hazard Class (40CFR 261)**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities.

**SECTION 14: Transport**

**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

DOT Road Shipment Information (49 CFR) Not applicable



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**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"
DOT Road Shipment Information (49 CFR)	Not applicable

**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
DOT Road Shipment Information (49 CFR)	Not applicable

**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
DOT Road Shipment Information (49 CFR)	Not applicable

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**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

DOT Road Shipment Information (49 CFR) 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**

**US Regulations**

**National regulations**

29 CFR 1910.1200-HCS 2012, OSHA-PEL, ACGIH-TLV, NTP, IARC, SARA Title III, NFPA, TSCA, California - Prop. 65

- SARA, 302 This product does not contain any ingredients regulated under this list.

- SARA, 311 This product does not contain any ingredients regulated under this list.

- SARA, 313 This product does not contain any ingredients regulated under this list.

- CA Proposition 65 No components require labeling under California Proposition 65.

- TSCA All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.

- FDA Not applicable

**American Conference of Governmental Industrial Hygienists - ACGIH** A4: Not classifiable as a human carcinogen.

**International Agency for Research on Cancer IARC** IARC: Not classifiable as to carcinogenicity to humans.

**National Toxicology Program - NTP** This product is not named NTP - National Toxicology Program.

**HAP-VOC** Not applicable

**Transport-regulations** DOT-Classification, ADR (2023); IMDG-Code (2023, 41. Amdt.); IATA-DGR (2024)

**15.2 Chemical safety assessment**

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

## SECTION 16: Other information

### 16.1 Abbreviations and acronyms:

ACGIH = American Conference of Governmental Industrial Hygienists;  
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;  
CAS = Chemical Abstracts Service;  
CERCLA = Comprehensive Environmental Response, Compensation and Liability Act;  
CFR = Code of Federal Regulations;  
CPR = Controlled Products Regulations;  
DMEL = Derived Minimum Effect Level;  
DNEL = Derived No Effect Level;  
DOT = Department of Transportation;  
EC50 = Median effective concentration;  
EPA = Environmental Protection Agency;  
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;  
IARC = International Agency of Research on Cancer;  
IATA = International Air Transport Association;  
TSCA = Toxic Substance Control Act;  
HMIS = Hazardous Materials Identification System;  
NFPA = National Fire Protection Association;  
NIOSH = National Institute for Occupational Safety and Health;  
OSHA = Occupational Safety and Health Administration;  
LC50 = Lethal concentration, 50%;  
LD50 = Median lethal dose, 50%;  
MARPOL = International Convention for the Prevention of Marine Pollution from Ships;  
PBT = Persistent, Bioaccumulative and Toxic substance;  
PNEC = Predicted No-Effect Concentration;  
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals;  
SARA = Superfund Amendments and Reauthorization Act;  
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;

### 16.2 Ratings



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**NFPA Ratings**



TOP, FLAMMABILITY: 1 - Slight Hazard  
LEFT, HEALTH: 1 - Slight Hazard  
RIGHT, REACTIVITY: 0 - Minimal Hazard  
BOTTOM, SPECIAL NOTICE: None

**HMIS Ratings**

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

1 - Slight Hazard  
1 - Slight Hazard  
0 - Minimal Hazard  
X - Personal protection rating to be supplied by user depending on use conditions

**PERSONAL PROTECTION:**

- A - Safety Glasses
- B - Safety Glasses and Gloves
- C - Safety Glasses, Gloves and Protection Apron
- D - Face Shield, Gloves and Protection Apron
- E - Safety Glasses, Gloves and Dust Respirator
- F - Safety Glasses, Gloves, Protection Apron and Dust Respirator
- G - Safety Glasses, Gloves and Vapor Respirator.
- H - Splash Goggles, Gloves, Protection Apron and Vapor Respirator.
- I - Safety Glasses, Gloves, Dust Respirator and Vapor Respirator.
- J - Splash Goggles, Gloves, Protection Apron, Dust Respirator and Vapor Respirator.
- K - Airline Mask or Hood, Gloves, Full Suit and Boots.
- X - Personal protection rating to be supplied by user depending on use conditions

**Modified position**

1.3, 3.2, 5.1, 6.1, 8.1, 8.2, 9.1, 11.1, 11.2, 12.6, 12.7, 15.1, 16.2, 16.3