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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 05.10.2020 / 0018
Replacing version dated / version: 10.12.2019 / 0017
Valid from: 05.10.2020
PDF print date: 06.10.2020
Hypoid-Getriebeoel (GL5) LS SAE 85W-90

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Hypoid-Getriebeoel (GL5) LS SAE 85W-90

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

Relevant identified uses of the substance or mixture:

Gear lubricant

Sector of use [SU]:

SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 - Consumer uses: Private households (=general public = consumers)

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC17 - Hydraulic fluids

PC24 - Lubricants, greases, release products

Process category [PROC]:

PROC 1 - Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC 2 - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC 8a - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC 8b - Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC 9 - Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC20 - Use of functional fluids in small devices

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC 4 - Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC 7 - Use of functional fluid at industrial site

ERC 9a - Widespread use of functional fluid (indoor)

ERC 9b - Widespread use of functional fluid (outdoor)

Life cycle stages (LCS):

LCS F - Formulation or re-packing

LCS IS - Use at industrial sites

LCS PW - Widespread use by professional workers

LCS C - Consumer use

Technical functions (TF):

Lubricating agent

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH

Jerg-Wieland-Str. 4

89081 Ulm-Lehr

Tel.: (+49) 0731-1420-0

Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

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+49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

| Hazard class | Hazard category | Hazard statement |
|-----------------|-----------------|---|
| Aquatic Chronic | 3 | H412-Harmful to aquatic life with long lasting effects. |

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

H412-Harmful to aquatic life with long lasting effects.

P273-Avoid release to the environment.

P501-Dispose of contents / container to an approved waste disposal facility.

EUH208-Contains Amines, C10-14-tert-alkyl. May produce an allergic reaction.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

| | |
|--|--|
| Amines, C10-14-tert-alkyl | |
| Registration number (REACH) | 01-2119456798-18-XXXX |
| Index | --- |
| EINECS, ELINCS, NLP | 701-175-2 (REACH-IT List-No.) |
| CAS | --- |
| content % | 0,25-<1 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) |
| C16-18-(even numbered, saturated and unsaturated)-alkylamines | |
| Registration number (REACH) | 01-2119473797-19-XXXX |
| Index | --- |
| EINECS, ELINCS, NLP | 627-034-4 (REACH-IT List-No.) |
| CAS | 1213789-63-9 |
| content % | 0,01-<0,1 |

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Classification according to Regulation (EC) 1272/2008 (CLP)

Acute Tox. 4, H302
Asp. Tox. 1, H304
Skin Corr. 1B, H314
Eye Dam. 1, H318
STOT SE 3, H335
Aquatic Acute 1, H400 (M=10)
Aquatic Chronic 1, H410 (M=10)
STOT RE 2, H373 (gastrointestinal tract, liver, immune system) (oral)

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.
For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.
Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

SECTION 4: First aid measures**4.1 Description of first aid measures**

First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water.
Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

The following may occur:

Drying of the skin.
Dermatitis (skin inflammation)
Allergic reaction possible.
On vapour formation:
Irritation of the respiratory tract
Ingestion:
Gastrointestinal disturbances
Nausea
Vomiting

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

CO₂
Foam
Dry extinguisher

Unsuitable extinguishing media

High volume water jet

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5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Aldehydes

Oxides of phosphorus

Metal oxides

Oxides of nitrogen

Hydrocarbons

Oxides of sulphur

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.

Avoid formation of oil mist.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.

Oil binder

Do not wash away with water or watery cleaning agents.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Avoid formation of oil mist.

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke.

Do not heat to temperatures close to flash point.

Avoid contact with eyes.

Avoid long lasting or intensive contact with skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

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Store product closed and only in original packing.
 Keep away from food, drink and animal feedingstuffs.
 Protect against moisture and store closed.
 Protect from direct sunlight and warming.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| Chemical Name | Oil mist, mineral | Content %: |
|---|--------------------------------------|------------|
| WEL-TWA: 5 mg/m3 (Mineral oil, excluding metal working fluids, ACGIH) | WEL-STEL: --- | --- |
| Monitoring procedures: | - Draeger - Oil Mist 1/a (67 33 031) | |
| BMGV: --- | Other information: --- | |

| Amines, C10-14-tert-alkyl | | | | | | |
|---------------------------|--|-----------------------------|------------|-------|--------------|------|
| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
| | Environment - freshwater | | PNEC | 0,001 | mg/l | |
| | Environment - marine | | PNEC | 0 | mg/l | |
| | Environment - sediment, freshwater | | PNEC | 2,14 | mg/kg dw | |
| | Environment - sediment, marine | | PNEC | 0,214 | mg/kg dw | |
| | Environment - soil | | PNEC | 0,428 | mg/kg dw | |
| | Environment - sewage treatment plant | | PNEC | 0,635 | mg/l | |
| | Environment - water, sporadic (intermittent) release | | PNEC | 0,004 | mg/l | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 0,35 | mg/kg bw/day | |

| C16-18-(even numbered, saturated and unsaturated)-alkylamines | | | | | | |
|---|--|-----------------------------|------------|-------|----------|------|
| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
| | Environment - freshwater | | PNEC | 0,26 | µg/l | |
| | Environment - marine | | PNEC | 0,026 | µg/l | |
| | Environment - sediment, freshwater | | PNEC | 3,76 | mg/kg dw | |
| | Environment - sediment, marine | | PNEC | 0,376 | mg/kg dw | |
| | Environment - soil | | PNEC | 10 | mg/kg dw | |
| | Environment - sewage treatment plant | | PNEC | 550 | µg/l | |
| | Environment - water, sporadic (intermittent) release | | PNEC | 1,6 | µg/l | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 0,04 | mg/kg | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 0,09 | mg/kg | |

Distillates (petroleum), hydrotreated heavy paraffinic

GB

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| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
|---------------------|--|------------------|------------|-------|-------|------|
| | Environment - oral (animal feed) | | PNEC | 9,33 | mg/kg | |

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).
 (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
 (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.
 (13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
 Applies only if maximum permissible exposure values are listed here.
 Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
 These are specified by e.g. EN 14042.
 EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
 Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.

Skin protection - Hand protection:
 Protective gloves, oil resistant (EN 374).
 If applicable
 Protective nitrile gloves (EN 374).
 Minimum layer thickness in mm:
 0,5
 Permeation time (penetration time) in minutes:
 120
 Protective hand cream recommended.
 The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
 The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
 Normally not necessary.
 With oil mist formation:
 Filter A2 P2 (EN 14387), code colour brown, white
 Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
 Not applicable

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Additional information on hand protection - No tests have been performed.
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
 Selection of materials derived from glove manufacturer's indications.
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|---------------------------------|
| Physical state: | Liquid |
| Colour: | Brown |
| Odour: | Characteristic |
| Odour threshold: | Not determined |
| pH-value: | Not determined |
| Melting point/freezing point: | Not determined |
| Initial boiling point and boiling range: | Not determined |
| Flash point: | 220 °C |
| Evaporation rate: | Not determined |
| Flammability (solid, gas): | Not determined |
| Lower explosive limit: | Not determined |
| Upper explosive limit: | Not determined |
| Vapour pressure: | Not determined |
| Vapour density (air = 1): | Not determined |
| Density: | 0,9 g/ml |
| Bulk density: | Not determined |
| Solubility(ies): | Not determined |
| Water solubility: | Insoluble |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Viscosity: | 185 mm ² /s (40°C) |
| Viscosity: | 17,5 mm ² /s (100°C) |
| Explosive properties: | Not determined |
| Oxidising properties: | Not determined |

9.2 Other information

| | |
|---------------------------|----------------|
| Miscibility: | Not determined |
| Fat solubility / solvent: | Not determined |
| Conductivity: | Not determined |
| Surface tension: | Not determined |
| Solvents content: | Not determined |

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No decomposition if used as intended.

10.4 Conditions to avoid

Heating, open flame, ignition sources
 Protect from humidity.

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

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Avoid contact with strong acids.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

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| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|----------|-------|---------|----------|-------------|------------------------------|
| Acute toxicity, by oral route: | | | | | | n.d.a. |
| Acute toxicity, by dermal route: | ATE | 2000 | mg/kg | | | calculated value |
| Acute toxicity, by inhalation: | ATE | >20 | mg/l/4h | | | calculated value, Vapours |
| Acute toxicity, by inhalation: | ATE | >5 | mg/l/4h | | | calculated value, Aerosol |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin sensitisation: | | | | | | n.d.a. |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | n.d.a. |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | n.d.a. |
| Aspiration hazard: | | | | | | n.d.a. |
| Symptoms: | | | | | | n.d.a. |

Amines, C10-14-tert-alkyl

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|----------|-------|---------|------------------------|---|-------------------------------------|
| Acute toxicity, by oral route: | LD50 | 612 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | 251 | mg/kg | Rat | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | 1,19 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Vapours, Female |
| Acute toxicity, by inhalation: | LC50 | 1,7 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Vapours, Male |
| Skin corrosion/irritation: | | | | Rabbit | | Skin Corr. 1B |
| Serious eye damage/irritation: | | | | Rabbit | | Eye Dam. 1 |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | Skin Sens. 1A |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Germ cell mutagenicity: | | | | Mammalian | OECD 476 (In Vitro Mammalian Cell Gene Mutation Test) | Negative |
| Reproductive toxicity (Developmental toxicity): | | | | Rat | OECD 414 (Prenatal Developmental Toxicity Study) | Negative |
| Reproductive toxicity (Effects on fertility): | | | | Rat | OECD 415 (One-Generation Reproduction Toxicity Study) | Negative |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | Irritation of the respiratory tract |
| Specific target organ toxicity - repeated exposure (STOT-RE), dermal: | NOAEL | 20 | mg/kg | Rat | OECD 410 (Repeated Dose Dermal Toxicity - 90-Day) | |

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| | | | | | | |
|---|-------|----|-------|-----|--|---------|
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | NOAEL | 19 | mg/m3 | Rat | OECD 412 (Subacute Inhalation Toxicity - 28-Day Study) | Vapours |
|---|-------|----|-------|-----|--|---------|

C16-18-(even numbered, saturated and unsaturated)-alkylamines

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|----------|--------|---------|------------------------|--|---|
| Acute toxicity, by oral route: | LD50 | 1689 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rat | OECD 402 (Acute Dermal Toxicity) | Analogous conclusion |
| Acute toxicity, by inhalation: | LD50 | >0,099 | ppmV/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Analogous conclusion, Aerosol |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Skin Corr. 1B |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | No (skin contact) |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Germ cell mutagenicity: | | | | | OECD 476 (In Vitro Mammalian Cell Gene Mutation Test) | Negative |
| Reproductive toxicity (Effects on fertility): | NOAEL | 12,5 | mg/kg | Rat | OECD 421 (Reproduction/Developmental Toxicity Screening Test) | Negative, Analogous conclusion |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | Irritation of the respiratory tract, STOT SE 3, H335 |
| Specific target organ toxicity - repeated exposure (STOT-RE), oral: | NOAEL | 3,25 | mg/kg/d | Rat | OECD 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents) | Target organ(s): gastrointestinal tract, liver, immune system |

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|--|----------|------|-------|------|----------|-------------|--|
| 12.1. Toxicity to fish: | | | | | | | n.d.a. |
| 12.1. Toxicity to daphnia: | | | | | | | n.d.a. |
| 12.1. Toxicity to algae: | | | | | | | n.d.a. |
| 12.2. Persistence and degradability: | | | | | | | Isolate as much as possible with an oil separator. |
| 12.3. Bioaccumulative potential: | | | | | | | Concentration in organisms possible. |
| 12.4. Mobility in soil: | | | | | | | n.d.a. |
| 12.5. Results of PBT and vPvB assessment | | | | | | | n.d.a. |
| 12.6. Other adverse effects: | | | | | | | n.d.a. |

Amines, C10-14-tert-alkyl

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|----------------------------------|-----------|------|-------|------|---------------------|---|-------|
| 12.1. Toxicity to fish: | NOEC/NOEL | 60d | 0,078 | mg/l | Oncorhynchus mykiss | OECD 210 (Fish, Early-Life Stage Toxicity Test) | |
| 12.3. Bioaccumulative potential: | Log Pow | | 2,9 | | | | Low |

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| | | | | | | | |
|--------------------------------------|-----------|-------|------|------|---------------------------------|--|---------------------------|
| 12.1. Toxicity to daphnia: | EC50 | 48h | 2,5 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to fish: | LC50 | 96h | 1,3 | mg/l | Oncorhynchus mykiss | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to algae: | EC50 | 72h | 0,44 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | 28d | 21,8 | % | | OECD 301 D (Ready Biodegradability - Closed Bottle Test) | Not readily biodegradable |
| 12.1. Toxicity to algae: | NOEC/NOEL | 72h | 0,05 | mg/l | Pseudokirchneriella subcapitata | OECD 201 (Alga, Growth Inhibition Test) | |
| Toxicity to bacteria: | EC50 | 30min | 63,5 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | |

C16-18 (even numbered, saturated and unsaturated)-alkylamines

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|--------------------------------------|----------|------|-------|------|---------------------------|--|-----------------------|
| 12.1. Toxicity to fish: | LC50 | 96h | 0,06 | mg/l | Pimephales promelas | | |
| 12.1. Toxicity to daphnia: | EL50 | 48h | 0,011 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to algae: | EC50 | 72h | 0,46 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.1. Toxicity to algae: | EL50 | 96h | 0,04 | mg/l | Selenastrum capricornutum | | |
| 12.2. Persistence and degradability: | | 28d | 66 | % | activated sludge | OECD 301 B (Ready Biodegradability - Co2 Evolution Test) | Readily biodegradable |
| Toxicity to bacteria: | EL50 | 3h | 32 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | Analogous conclusion |

SECTION 13: Disposal considerations
13.1 Waste treatment methods
For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of.
 EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

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13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils

Recommendation:

Sewage disposal shall be discouraged.
 Pay attention to local and national official regulations.
 E.g. dispose at suitable refuse site.
 E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

15 01 01 paper and cardboard packaging

15 01 02 plastic packaging

15 01 04 metallic packaging

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

14.1. UN number: n.a.

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Classification code: n.a.

LQ: n.a.

14.5. Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

Marine Pollutant: n.a.

14.5. Environmental hazards: Not applicable

Transport by air (IATA)

14.2. UN proper shipping name:

14.3. Transport hazard class(es): n.a.

14.4. Packing group: n.a.

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

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

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Observe restrictions:

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 0,75 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

1, 3, 8, 11, 12, 15

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

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Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

| Classification in accordance with regulation (EC) No. 1272/2008 (CLP) | Evaluation method used |
|---|--|
| Aquatic Chronic 3, H412 | Classification according to calculation procedure. |

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H330 Fatal if inhaled.
 H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
 H317 May cause an allergic skin reaction.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.
 H311 Toxic in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

Aquatic Chronic — Hazardous to the aquatic environment - chronic
 Acute Tox. — Acute toxicity - oral
 Acute Tox. — Acute toxicity - dermal
 Acute Tox. — Acute toxicity - inhalation
 Skin Corr. — Skin corrosion
 Eye Dam. — Serious eye damage
 Skin Sens. — Skin sensitization
 Aquatic Acute — Hazardous to the aquatic environment - acute
 Asp. Tox. — Aspiration hazard
 STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation
 STOT RE — Specific target organ toxicity - repeated exposure

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
 ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
 AOX Adsorbable organic halogen compounds
 approx. approximately
 Art., Art. no. Article number
 ASTM ASTM International (American Society for Testing and Materials)
 ATE Acute Toxicity Estimate
 BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
 BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
 BSEF The International Bromine Council
 bw body weight
 CAS Chemical Abstracts Service
 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
 CMR carcinogenic, mutagenic, reproductive toxic
 DMEL Derived Minimum Effect Level
 DNEL Derived No Effect Level
 dw dry weight
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
 EC European Community
 ECHA European Chemicals Agency
 EEC European Economic Community
 EINECS European Inventory of Existing Commercial Chemical Substances

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ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
OECD Organisation for Economic Co-operation and Development
org. organic
PBT persistent, bioaccumulative and toxic
PE Polyethylene
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC Substances of Very High Concern
Tel. Telephone
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.

These statements were made by:

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