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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

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Special Tec LL 5W-30

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

Lubricant 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:

+49 (0) 700 / 24 112 112 (LMR) +1 872 5888271 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH208-Contains Calcium alkyl aryl sulfonate, long-chain, Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts. May produce an allergic reaction. EUH210-Safety data sheet available on request.

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 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %). Product can compose a film on the water surface, which can prevent oxygen exchange.



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SECTION 3: Composition/information on ingredients

3.1 Substances

n.a. 3.2 Mixtures

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| 3.2 Mixtures | |
|--|-------------------------|
| Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | |
| Registration number (REACH) | 01-2119474889-13-XXXX |
| Index | 649-483-00-5 |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 276-738-4 |
| CAS | 72623-87-1 |
| content % | 10-<20 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Asp. Tox. 1, H304 |
| | |
| Highly refined mineral oil (C15 - C50) * | |
| Registration number (REACH) | |
| Index | |
| EINECS, ELINCS, NLP, REACH-IT List-No. | |
| CAS | |
| content % | 1-<10 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Asp. Tox. 1, H304 |
| | |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) | |
| esters, zinc salts | |
| Registration number (REACH) | 01-2119657973-23-XXXX |
| Index | |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 272-238-5 |
| CAS | 68784-31-6 |
| content % | <2,5 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Eye Dam. 1, H318 |
| | Aquatic Chronic 2, H411 |
| | |
| Calcium alkyl aryl sulfonate, long-chain | |
| Registration number (REACH) | |
| Index | |
| EINECS, ELINCS, NLP, REACH-IT List-No. | |
| CAS | 722503-69-7 |
| content % | <2,5 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Skin Sens. 1B, H317 |
| | |

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 contained mineral oil can be described by one or more of the following numbers:

| EINECS, ELINCS, NLP, REACH- | Registration number (REACH) | Chemical name |
|-----------------------------|-----------------------------|--|
| IT List-No. | | |
| 265-090-8 | | Baseoil - unspecified |
| 265-091-3 | | Distillates (petroleum), solvent-refined light paraffinic |
| 265-097-6 | | Distillates (petroleum), solvent-refined heavy naphthenic |
| 265-098-1 | | Distillates (petroleum), solvent-refined light naphthenic |
| 265-101-6 | | Baseoil - unspecified |
| 265-156-6 | | Distillates (petroleum), hydrotreated light naphthenic |
| 265-157-1 | | Distillates (petroleum), hydrotreated heavy paraffinic |
| 265-158-7 | | Distillates (petroleum), hydrotreated light paraffinic |
| 265-159-2 | | Distillates (petroleum), solvent-dewaxed light paraffinic |
| 265-169-7 | | Distillates (petroleum), solvent-dewaxed heavy paraffinic |
| 276-737-9 | | Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based |
| 276-738-4 | | Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based |
| 278-012-2 | | Baseoil - unspecified |
| 265-155-0 | | Baseoil - unspecified |
| 276-735-8 | | Lubricating oils (petroleum), C>25, hydrotreated bright stock-based |
| 276-736-3 | | Baseoil - unspecified |
| 265-096-0 | | Residual oils (petroleum), solvent deasphalted |



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| 265-160-8 | | Residual oils (petroleum), hydrotreated |
|-----------|---|--|
| 265-161-3 | | Lubricating oils (petroleum), hydrotreated spent |
| 265-166-0 | | Residual oils (petroleum), solvent-dewaxed |
| 265-176-5 | | Paraffin oils (petroleum), catalytic dewaxed light |
| | • | |

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.

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. Danger of aspiration.

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.

With long-term contact: Irritation of the eyes with long-term contact: Drying of the skin. Dermatitis (skin inflammation)

Irritation of the skin.

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 Water jet spray Unsuitable extinguishing media High volume water jet 5.2 Special hazards arising from the substance or mixture In case of fire the following can develop: Oxides of carbon Oxides of nitrogen Oxides of sulphur Oxides of phosphorus Flammable vapour/air mixtures Hot product gives off combustible vapours. 5.3 Advice for firefighters For personal protective equipment see Section 8.



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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

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination. Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Avoid formation of oil mist.

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Remove possible causes of ignition - do not smoke.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

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) and dispose of according to Section 13.

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.

Take measures against electrostatic charging, if appropriate.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room. Do not carry cleaning cloths soaked in product in trouser pockets.

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

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Do not store with flammable or self-igniting materials. Protect against moisture and store closed.

Under all circumstances prevent penetration into the soil.

7.3 Specific end use(s)

No information available at present.



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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 V | WEL-STEL: | | |
| working fluids, ACGIH) | | | | |
| Monitoring procedures: | - Drae | aeger - Oil Mist 1/a (67 33 031) | | |
| BMGV: | | | Other information: - | |

| Lubricating oils (petroleum), | Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based | | | | | | | | |
|-------------------------------|--|--------------------------|------------|-------|------------|------|--|--|--|
| Area of application | Exposure route / | Effect on health | Descriptor | Value | Unit | Note | | | |
| | Environmental | | - | | | | | | |
| | compartment | | | | | | | | |
| | Human - oral | | PNEC | 9,33 | mg/kg feed | | | | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 1,2 | mg/m3 | 24h | | | |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 5,4 | mg/m3 | 8h | | | |

| Area of application | Exposure route / Environmental | Effect on health | Descriptor | Value | Unit | Note |
|---------------------|--|--------------------------------|------------|---------|-------|------|
| | compartment | | | | | |
| | Environment - water | | PNEC | 4 | µg/l | |
| | Environment - marine | | PNEC | 4,6 | µg/l | |
| | Environment - water, sporadic (intermittent) release | | PNEC | 4,4 | µg/l | |
| | Environment - sediment, marine | | PNEC | 0,00701 | mg/kg | |
| | Environment - soil | | PNEC | 0,0548 | mg/kg | |
| | Environment - oral (animal feed) | | PNEC | 8,33 | mg/kg | |
| | Environment - sewage treatment plant | | PNEC | 3,8 | mg/l | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 4,8 | mg/kg | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 0,19 | mg/kg | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 1,67 | mg/kg | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 9,6 | mg/kg | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 6,6 | mg/kg | |

B 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).



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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 ISO 374). If applicable Protective nitrile gloves (EN ISO 374). Protective Neoprene® / polychloroprene gloves (EN ISO 374). Minimum layer thickness in mm: 0,35 Permeation time (penetration time) in minutes:

>= 480

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

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:



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Colour:

Odour: Melting point/freezing point: Boiling point or initial boiling point and boiling range: Flammability: Lower explosion limit: Upper explosion limit: Flash point: Auto-ignition temperature: Decomposition temperature: pH: Kinematic viscosity: Kinematic viscosity: Solubility: Partition coefficient n-octanol/water (log value): Vapour pressure: Density and/or relative density: Relative vapour density: Particle characteristics:

9.2 Other information

Explosives: Oxidising liquids: Bulk density:

Brown Characteristic There is no information available on this parameter. There is no information available on this parameter. Flammable n.a. n.a. 230 °C There is no information available on this parameter. There is no information available on this parameter. Mixture is non-soluble (in water). 72 mm2/s (40°C) 12 mm2/s (100°C) Insoluble Does not apply to mixtures. There is no information available on this parameter. 0,855 g/ml There is no information available on this parameter. Does not apply to liquids.

n.a. No n.a.

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 dangerous reactions are known. **10.4 Conditions to avoid**

See also section 7.

Open flame, ignition sources Protect from humidity.

10.5 Incompatible materials

See also section 7. Avoid contact with strong oxidizing agents. Avoid contact with strong acids.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

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

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

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|----------------------------------|----------|-------|------|----------|-------------|--------|
| Acute toxicity, by oral route: | | | | | | n.d.a. |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin | | | | | | n.d.a. |
| sensitisation: | | | | | | |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |



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|---|--------------------------|----------------|---------------------|---------------------------|---|--|
| • | Γ | | 1 | 1 | | |
| Specific target organ toxicity - single exposure (STOT-SE): Specific target organ toxicity - | | | | | | n.d.a. |
| repeated exposure (STOT-RE): | | | | | | n.u.a. |
| Aspiration hazard: Symptoms: | | | | | | n.d.a. n.d.a. |
| | | | | | | 11.u.a. |
| Lubricating oils (petroleum), C2 Toxicity / effect | 20-50, hydro Endpoint | treated neutra | l oil-based Unit | Organiam | Toot mothed | Notes |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Organism Rat | Test method OECD 401 (Acute Oral | Notes |
| | | | | | Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >5000 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | >5,53 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant, Repeated exposure may cause skin dryness or cracking. |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | No (skin contac |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative, Analogous conclusion |
| Germ cell mutagenicity: | | | | | OECD 473 (In Vitro Mammalian Chromosome | Negative, Analogous conclusion |
| Germ cell mutagenicity: | | | | Mouse | Aberration Test) OECD 476 (In Vitro Mammalian Cell Gene Mutation Test) | Chinese hamste Negative, Analogous conclusion |
| Germ cell mutagenicity: | | | | Mouse | OECD 474 (Mammalian Erythrocyte Micronucleus Test) | Negative, Analogous conclusion |
| Carcinogenicity: | | | | | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Negative |
| Carcinogenicity: | | | | Mouse | OECD 451 (Carcinogenicity Studies) | Negative, Analogous conclusion |
| Reproductive toxicity: | | | | | OECD 414 (Prenatal Developmental Toxicity Study) | Negative |
| Reproductive toxicity: | | | | | OECD 421 (Reproduction/Developm ental Toxicity Screening Test) | Negative |
| Reproductive toxicity: | | | | Rat | OECD 421 (Reproduction/Developm ental Toxicity Screening Test) | Negative, Analogous conclusion |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in | Negative |



| GB) | | | | | | | |
|---|---------------|------------|-------------|-------------|---------------------------|---|--------------------------|
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| | | | | | | | |
| Specific target organ toxicity - | | | | | | OECD 410 (Repeated | Negative |
| repeated exposure (STOT-RE): | | | | | | Dose Dermal Toxicity - | |
| Specific torget orgen tovicity | | | | | | 90-Day) OECD 411 (Subchronic | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | Dermal Toxicity - 90-day | Negative |
| | | | | | | Study) | |
| Specific target organ toxicity - | | | | | | OECD 412 (Subacute | Negative |
| repeated exposure (STOT-RE): | | | | | | Inhalation Toxicity - 28- | |
| A | | | | | | Day Study) | |
| Aspiration hazard: | | | | | | | Asp. Tox. 1 |
| Phosphorodithioic acid, mixed | 0.0-bis(se | c-Bu and | 1.3-dimeth | vlbutvl) es | ters. zinc salts | | |
| Toxicity / effect | Endpoint | | | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | 2900 | | mg/kg | Rat | OECD 401 (Acute Oral | |
| | | | - | | | Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >500 | 0 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Serious eye damage/irritation: | | | | | Rabbit | OECD 405 (Acute Eye | Eye Dam. 1 |
| conous eye damage/imation. | | | | | Rabbit | Irritation/Corrosion) | Lye Dam. 1 |
| Respiratory or skin | | | | | Guinea pig | OECD 406 (Skin | No (skin contact |
| sensitisation: | | | | | | Sensitisation) | |
| Germ cell mutagenicity: | | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Germ cell mutagenicity: | | | | | Mouse | OECD 474 (Mammalian | Negative |
| | | | | | | Erythrocyte | - 3 |
| | | | | | | Micronucleus Test) | |
| Specific target organ toxicity - | NOAEL | 125 | | mg/kg | Rat | OECD 407 (Repeated | Analogous |
| repeated exposure (STOT-RE), oral: | | | | bw/d | | Dose 28-Day Oral Toxicity Study in | conclusion |
| oral. | | | | | | Rodents) | |
| | | | | | 1 | 1.0001110/ | |
| 11.2. Information on o | ther haza | rds | | | | | |
| Special Tec LL 5W-30 | | | | | | | _ |
| Toxicity / effect | Endpoint | Value | e | Unit | Organism | Test method | Notes |
| Endocrine disrupting properties: | | | | | | | Does not apply |
| Other information: | | | | | | | to mixtures. No other |
| | | | | | | | relevant |
| | | | | | | | information |
| | | | | | | | available on |
| | | | | | | | adverse effects |
| | | | | | | | on health. |
| | | | | | | | |
| | Ş | SECTIC |)N 12: F | Ecologi | cal informat | ion | |
| | | | | | | | |
| Possibly more information on an | vironmontal | offocto co | o Soction 7 | | ation) | | |
| Possibly more information on en Special Tec LL 5W-30 | | enecis, se | | | auon). | | |
| | point | 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 fish:
 1.1.1.2
 1.1.1.2
 1.1.1.2
 1.1.1.2
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| 12.5. Results of PBT | n.d.a. |
|------------------------|------------------|
| and vPvB assessment | |
| 12.6. Endocrine | Does not apply |
| disrupting properties: | to mixtures. |
| 12.7. Other adverse | No information |
| effects: | available on |
| | other adverse |
| | effects on the |
| | environment. |
| Other information: | According to the |
| | recipe, contains |
| | no ÁOX. |

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|----------------------------|-----------|-------|--------|------|--------------------|--------------------|---------------|
| Toxicity to bacteria: | NOEC/NOEL | 10min | > 1,93 | mg/l | activated sludge | | DIN 38412 |
| 12.1. Toxicity to fish: | NOEC/NOEL | 96h | >=100 | mg/l | Pimephales | OECD 203 (Fish, | |
| - | | | | - | promelas | Acute Toxicity | |
| | | | | | | Test) | |
| 12.1. Toxicity to fish: | LL50 | 96h | > 100 | mg/l | Pimephales | OECD 203 (Fish, | |
| \$ | | | | Ū | promelas | Acute Toxicity | |
| | | | | | | Test) | |
| 12.1. Toxicity to daphnia: | EL50 | 48h | >10000 | mg/l | Daphnia magna | OECD 202 | |
| , i | | | | Ū | 1 5 | (Daphnia sp. | |
| | | | | | | Acute | |
| | | | | | | Immobilisation | |
| | | | | | | Test) | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | 10 | mg/l | Daphnia magna | OECD 211 | |
| | | | | | | (Daphnia magna | |
| | | | | | | Reproduction Test) | |
| 12.1. Toxicity to algae: | NOEC/NOEL | 72h | >=100 | mg/l | Pseudokirchneriell | OECD 201 (Alga, | |
| | | | | | a subcapitata | Growth Inhibition | |
| | | | | | | Test) | |
| 12.1. Toxicity to algae: | EL50 | 48h | >100 | mg/l | Pseudokirchneriell | OECD 201 (Alga, | |
| | | | | | a subcapitata | Growth Inhibition | |
| | | | | | | Test) | |
| 12.2. Persistence and | | | | | | OECD 301 B | Not readily |
| degradability: | | | | | | (Ready | biodegradable |
| | | | | | | Biodegradability - | |
| | | | | | | Co2 Evolution | |
| | | | | | | Test) | |
| 12.2. Persistence and | | 28d | 46 | % | | OECD 301 B | |
| degradability: | | | - | | | (Ready | |
| | | | | | | Biodegradability - | |
| | | | | | | Co2 Evolution | |
| | | | | | | Test) | |
| 12.3. Bioaccumulative | Log Kow | | >6 | | | , | A notable |
| potential: | | | | | | | biological |
| | | | | | | | accumulation |
| | | | | | | | potential has |
| | | | | | | | be expected |
| | | | | | | | (LogPow > 3) |
| 12.5. Results of PBT | | | | | | | No PBT |
| and vPvB assessment | | | | | | | substance, No |
| | | | | | | | vPvB substan |

| Phosphorodithioic acid, mixed 0,0-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | | | | | | | |
|--|----------|------|-------|------|------------------------|--|-------|
| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| 12.1. Toxicity to fish: | LL50 | 96h | 4,4 | mg/l | Oncorhynchus mykiss | OECD 203 (Fish, Acute Toxicity Test) | |



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| 12.1. Toxicity to daphnia: | EL50 | 48h | 75 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
|--------------------------------------|------|-----|-----|------|----------------------------|--|----------------------|
| 12.1. Toxicity to algae: | EL50 | 72h | 410 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | 27d | <5 | % | | Regulation (EC) 440/2008 C.6 (DEGRADATION - CHEMICAL OXYGEN DEMAND) | Not biodegradable |

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)

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.

Implement substance recycling.

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 or ID 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. |
| | |



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14.4. Packing group: 14.5. Environmental hazards:

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14.6. Special precautions for user Unless specified otherwise, general measures for safe transport must be followed.

14.7. Maritime transport in bulk according to IMO instruments

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

n.a.

Not applicable

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

General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC):

0 g/l

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

Observe restrictions:

1-16

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

Not applicable

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). H317 May cause an allergic skin reaction. H304 May be fatal if swallowed and enters airways.

H304 May be fatal if swallowed and enters airways. H318 Causes serious eye damage.

H411 Toxic to aquatic life with long lasting effects.

Asp. Tox. — Aspiration hazard Eye Dam. — Serious eye damage Aquatic Chronic — Hazardous to the aquatic environment - chronic Skin Sens. — Skin sensitization

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.

Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).

EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended.

Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

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



ആ Page 13 of 14 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0015 Replacing version dated / version: 03.07.2020 / 0014 Valid from: 01.11.2021 PDF print date: 01.11.2021 Special Tec LL 5W-30 Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF **Bioconcentration factor** BSEF The International Bromine Council body weight bw Chemical Abstracts Service CAS 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 DOC Dissolved organic carbon drv weight dw e.a. for example (abbreviation of Latin 'exempli gratia'), for instance EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants) EC **European Community** ECHA European Chemicals Agency ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect EEC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances FN European Norms United States Environmental Protection Agency (United States of America) FPA $ErCx, E\mu Cx, ErLx (x = 10, 50)$ Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants) et cetera etc. European Union EU EVAL Ethylene-vinyl alcohol copolymer Fax number Fax. gen. general ĞHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential Adsorption coefficient of organic carbon in the soil Koc octanol-water partition coefficient Kow IARC International Agency for Research on Cancer International Air Transport Association IATA IBC (Code) International Bulk Chemical (Code) IMDG-code International Maritime Code for Dangerous Goods including, inclusive incl. IUCLID 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) Log Koc Logarithm of adsorption coefficient of organic carbon in the soil Log Kow, Log Pow Logarithm of octanol-water partition coefficient LQ Limited Quantities MARPOL International Convention for the Prevention of Marine Pollution from Ships not applicable n.a. n.av. not available not checked n.c. no data available n.d.a. NLP No-longer-Polymer NOEC, NOEL No Observed Effect Concentration/Level OECD Organisation for Economic Co-operation and Development ora. organic PBT persistent, bioaccumulative and toxic ΡE Polyethylene PNEC Predicted No Effect Concentration ppm parts per million PVC Polyvinylchloride REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)



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 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

 TOC
 Total organic carbon

 UN RTDG
 United Nations Recommendations on the Transport of Dangerous Goods

 VOC
 Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

GB

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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