

# **20204 SPECIAL TEC V 0W-30 5L**

### Liqui Moly GmbH

Chemwatch: **64-9719** Version No: **3.1.1.1** 

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

### Chemwatch Hazard Alert Code: 1

Issue Date: 01/11/2019 Print Date: 31/03/2020 S.GHS.USA.EN

# **SECTION 1 IDENTIFICATION**

### **Product Identifier**

| Product name                  | 20204 SPECIAL TEC V 0W-30 5L |
|-------------------------------|------------------------------|
| Synonyms                      | Item code: 20204             |
| Other means of identification | Not Available                |

### Recommended use of the chemical and restrictions on use

| Relevant identified uses | Motor oil.                                  |
|--------------------------|---|
| Relevant identified uses | Use according to manufacturer's directions. |

### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

| Registered company name | Liqui Moly GmbH                            |
|-------------------------|--|
| Address                 | Jerg-Wieland-Strasse 4 Ulm D-89081 Germany |
| Telephone               | +49 731 1420 0                             |
| Fax                     | +49 731 1420 82                            |
| Website                 | http://www.liqui-moly.com/                 |
| Email                   | Not Available                              |

# Emergency phone number

| Association / Organisation        | INFOTRAC                             |  |
|-----------------------------------|--------------------------------------|--|
| Emergency telephone numbers       | +1800 535 5053 (US, Canada & Mexico) |  |
| Other emergency telephone numbers | +1 352 323 3500 (International)      |  |

# **SECTION 2 HAZARD(S) IDENTIFICATION**

### Classification of the substance or mixture

# CHEMWATCH HAZARD RATINGS





Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

| Classification      | Eye Irritation Category 2B |  |
|---------------------|----------------------------|--|
| Label elements      |                            |  |
| Hazard pictogram(s) | Not Applicable             |  |
| SIGNAL WORD         | WARNING                    |  |
| Hazard statement(s) |                            |  |
| H320                | Causes eve irritation.     |  |

# Hazard(s) not otherwise classified

Not Applicable

# Precautionary statement(s) Prevention

P264 Wash all exposed external body areas thoroughly after handling.

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### Precautionary statement(s) Response

| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
|----------------|--|
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |

### Precautionary statement(s) Storage

Not Applicable

### Precautionary statement(s) Disposal

Not Applicable

### **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

### Substances

See section below for composition of Mixtures

### **Mixtures**

| CAS No        | %[weight] | Name  |
|---------------|-----------|---|
| 64742-54-7.   | 40-70     | paraffinic distillate, heavy, hydrotreated (severe) |
| 157707-86-3   | 20-40     | 1-decene, trimers, hydrogenated                     |
| Not Available | 1-<10     | mineral oil   |
| Not Available |           | (as base oil)                                       |
| 36878-20-3    | 1-2.5     | nonylated diphenylamines                            |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

### **SECTION 4 FIRST-AID MEASURES**

### **Description of first aid measures**

| Eye Contact  | <ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>   |
|--------------|---|
| Skin Contact | If skin or hair contact occurs:  ▶ Flush skin and hair with running water (and soap if available).  ▶ Seek medical attention in event of irritation.  |
| Inhalation   | <ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor.</li> </ul>   |
| Ingestion    | <ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> <li>If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul> |

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

See Section 11

# Indication of any immediate medical attention and special treatment needed

- ▶ Heavy and persistent skin contamination over many years may lead to dysplastic changes. Pre-existing skin disorders may be aggravated by exposure to this product.
- ▶ In general, emesis induction is unnecessary with high viscosity, low volatility products, i.e. most oils and greases.
- High pressure accidental injection through the skin should be assessed for possible incision, irrigation and/or debridement.

**NOTE:** Injuries may not seem serious at first, but within a few hours tissue may become swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Product may be forced through considerable distances along tissue planes.

### **SECTION 5 FIRE-FIGHTING MEASURES**

# Extinguishing media

- ▶ Foam
- Dry chemical powder.
- ▶ BCF (where regulations permit).
- Carbon dioxide.

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| Fire Incompatibility           | ► Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result   |
|--------------------------------|--|
| Special protective equipment a | and precautions for fire-fighters  |
| Fire Fighting                  | <ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear full body protective clothing with breathing apparatus.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> </ul>  |
| Fire/Explosion Hazard          | <ul> <li>Combustible.</li> <li>Slight fire hazard when exposed to heat or flame.</li> <li>Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>On combustion, may emit toxic fumes of carbon monoxide (CO).</li> <li>Combustion products include:         <ul> <li>carbon dioxide (CO2)</li> <li>sulfur oxides (SOx)</li> <li>other pyrolysis products typical of burning organic material.</li> </ul> </li> <li>May emit poisonous fumes.</li> <li>May emit corrosive fumes.</li> <li>CARE: Water in contact with hot liquid may cause foaming and a steam explosion with wide scattering of hot oil and possible severe burns.</li> </ul> |

Foaming may cause overflow of containers and may result in possible fire.

# **SECTION 6 ACCIDENTAL RELEASE MEASURES**

### Personal precautions, protective equipment and emergency procedures

See section 8

### **Environmental precautions**

See section 12

# Methods and material for containment and cleaning up

| Minor Spills | Slippery when spilt.  Framove all ignition sources.  Clean up all spills immediately.  Avoid breathing vapours and contact with skin and eyes.  Control personal contact with the substance, by using protective equipment. |
|--------------|---|
| Major Spills | Slippery when spilt.  Moderate hazard.  Clear area of personnel and move upwind.  Alert Fire Brigade and tell them location and nature of hazard.  Wear breathing apparatus plus protective gloves.                         |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

# **SECTION 7 HANDLING AND STORAGE**

| Precautions for safe handling   |  |
|---|--|
| pS/m and is of precautions at influence the  ► Electrost ► Ensure e  ► Restrict I diameter ► Avoid spi ► Avoid all ► Wear pro  ► Use in a | onsidered semi-conductive if its conductivity is below 100 onsidered semi-conductive if its conductivity is below 100 onsidered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semi-conductive, the re the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly conductivity of a liquid.  attic discharge may be generated during pumping - this may result in fire.  ectrical continuity by bonding and grounding (earthing) all equipment.  ne velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its then <= 7 m/sec).  ash filling.  personal contact, including inhalation.  tective clothing when risk of exposure occurs.  well-ventilated area.  concentration in hollows and sumps. |
| Other information   ► Keep cor ► No smok  | original containers. tainers securely sealed. ng, naked lights or ignition sources. tool, dry, well-ventilated area.   |

| Conditions for safe storage, including any incompatibilities |  |  |
|--|--|--|
| Suitable container   | <ul> <li>Metal can or drum</li> <li>Packaging as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>   |  |
| Storage incompatibility                                      | CARE: Water in contact with heated material may cause foaming or a steam explosion with possible severe burns from wide scattering of hot material. Resultant overflow of containers may result in fire.  • Avoid reaction with oxidising agents |  |

# SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Control parameters**

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

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| Source   | Ingredient   | Material name  | TWA        | STEL             | Peak             | Notes            |
|--|--|--|------------|------------------|------------------|------------------|
| US NIOSH Recommended<br>Exposure Limits (RELs)           | paraffinic distillate, heavy, hydrotreated (severe)    | Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist  | 5<br>mg/m3 | 10 mg/m3         | Not<br>Available | Not<br>Available |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z1 | paraffinic distillate, heavy, hydrotreated (severe)    | Oil mist, mineral  | 5<br>mg/m3 | Not<br>Available | Not<br>Available | Not<br>Available |
| US ACGIH Threshold Limit<br>Values (TLV)                 | paraffinic distillate, heavy,<br>hydrotreated (severe) | Mineral oil, excluding metal working fluids - Pure, highly and severely refined (Inhalable particulate matter) | 5<br>mg/m3 | Not<br>Available | Not<br>Available | URT irr          |
| US NIOSH Recommended Exposure Limits (RELs)              | mineral oil  | Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist  | 5<br>mg/m3 | 10 mg/m3         | Not<br>Available | Not<br>Available |
| US OSHA Permissible Exposure<br>Levels (PELs) - Table Z1 | mineral oil  | Oil mist, mineral  | 5<br>mg/m3 | Not<br>Available | Not<br>Available | Not<br>Available |
| US ACGIH Threshold Limit<br>Values (TLV)                 | mineral oil  | Mineral oil, excluding metal working fluids - Pure, highly and severely refined (Inhalable particulate matter) | 5<br>mg/m3 | Not<br>Available | Not<br>Available | URT irr          |

### **EMERGENCY LIMITS**

| Ingredient   | Material name  | TEEL-1       | TEEL-2         | TEEL-3         |
|--|--|--------------|----------------|----------------|
| paraffinic distillate, heavy,<br>hydrotreated (severe) | Mineral oil, heavy or light; (paraffin oil; Deobase, deodorized; heavy paraffinic; heavy naphthenic); distillates; includes 64741-53-3, 64741-88-4, 8042-47-5, 8012-95-1; 64742-54-7 | 140<br>mg/m3 | 1,500<br>mg/m3 | 8,900<br>mg/m3 |
| mineral oil  | Mineral oil, heavy or light; (paraffin oil; Deobase, deodorized; heavy paraffinic; heavy naphthenic); distillates; includes 64741-53-3, 64741-88-4, 8042-47-5, 8012-95-1; 64742-54-7 | 140<br>mg/m3 | 1,500<br>mg/m3 | 8,900<br>mg/m3 |

| Ingredient   | Original IDLH | Revised IDLH  |
|--|---------------|---------------|
| paraffinic distillate, heavy,<br>hydrotreated (severe) | 2,500 mg/m3   | Not Available |
| 1-decene, trimers, hydrogenated                        | Not Available | Not Available |
| mineral oil  | 2,500 mg/m3   | Not Available |
| nonylated diphenylamines                               | Not Available | Not Available |

### **Exposure controls**

### Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

### Personal protection









# Eye and face protection

- ► Safety glasses with side shields
- ► Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

### Skin protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

### Hands/feet protection

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care.

- Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

### **Body protection**

See Other protection below

Other protection

 Overalls. P.V.C. apron.

Barrier cream.

### Respiratory protection

Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator   |
|------------------------------------|----------------------|----------------------|--------------------------|
| up to 10 x ES                      | AK-AUS P2            | -                    | AK-PAPR-AUS / Class 1 P2 |
| up to 50 x ES                      | -                    | AK-AUS / Class 1 P2  | -                        |
| up to 100 x ES                     | -                    | AK-2 P2              | AK-PAPR-2 P2 ^           |

<sup>^ -</sup> Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

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- ► Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- F The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

# **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

### Information on basic physical and chemical properties

| Appearance                                   | Brown colour liquid with characteristic odour; not misc | cible with water.                       |                |
|--|---|---|----------------|
| Physical state                               | Liquid  | Relative density (Water = 1)            | 0.845          |
| Odour  | Not Available   | Partition coefficient n-octanol / water | Not Available  |
| Odour threshold                              | Not Available   | Auto-ignition temperature (°C)          | Not Available  |
| pH (as supplied)                             | Not Applicable  | Decomposition temperature               | Not Available  |
| Melting point / freezing point (°C)          | Not Available   | Viscosity (cSt)                         | 51.4           |
| Initial boiling point and boiling range (°C) | Not Available   | Molecular weight (g/mol)                | Not Applicable |
| Flash point (°C)                             | 234   | Taste                                   | Not Available  |
| Evaporation rate                             | Not Available   | Explosive properties                    | Not Available  |
| Flammability                                 | Not Applicable  | Oxidising properties                    | Not Available  |
| Upper Explosive Limit (%)                    | Not Available   | Surface Tension (dyn/cm or mN/m)        | Not Available  |
| Lower Explosive Limit (%)                    | Not Available   | Volatile Component (%vol)               | Not Available  |
| Vapour pressure (kPa)                        | Not Available   | Gas group                               | Not Available  |
| Solubility in water                          | Immiscible  | pH as a solution (1%)                   | Not Available  |
| Vapour density (Air = 1)                     | Not Available   | VOC g/L                                 | Not Available  |

### **SECTION 10 STABILITY AND REACTIVITY**

| Reactivity                         | See section 7  |
|------------------------------------|--|
| Chemical stability                 | <ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul> |
| Possibility of hazardous reactions | See section 7  |
| Conditions to avoid                | See section 7  |
| Incompatible materials             | See section 7  |
| Hazardous decomposition products   | See section 5  |

### **SECTION 11 TOXICOLOGICAL INFORMATION**

### Information on toxicological effects

| information on toxicological el | ieuto  |
|---------------------------------|--|
| Inhaled                         | Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.  There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.  Inhalation hazard is increased at higher temperatures.  Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.  Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.  Inhalation of oil droplets or aerosols may cause discomfort and may produce chemical inflammation of the lungs. |
| Ingestion                       | Accidental ingestion of the material may be damaging to the health of the individual.  Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.   |
| Skin Contact                    | The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.  Open cuts, abraded or irritated skin should not be exposed to this material  The material may accentuate any pre-existing dermatitis condition  Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.   |
| Eye                             | There is some evidence to suggest that this material can cause eye irritation and damage in some persons.  |

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Chronic

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin.

Oil may contact the skin or be inhaled. Extended exposure can lead to eczema, inflammation of hair follicles, pigmentation of the face and warts on the soles of the feet.

| 20204 SPECIAL TEC V 0W-30<br>5L | TOXICITY  Not Available   | IRRITATION  Not Available  |  |
|---------------------------------|---|--|--|
|                                 | TOXICITY  | IRRITATION   |  |
| paraffinic distillate, heavy,   | Dermal (rabbit) LD50: >2000 mg/kg <sup>[2]</sup>  | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |  |
| hydrotreated (severe)           | Inhalation (rat) LC50: >5.3 mg/l4 h <sup>[1]</sup>  | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |  |
|                                 | Oral (rat) LD50: >2000 mg/kg <sup>[2]</sup>   |  |  |
|                                 | TOXICITY  | IRRITATION   |  |
| 1-decene, trimers,              | dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>   | Not Available  |  |
| hydrogenated                    | Inhalation (rat) LC50: 0.9 mg/l4 h <sup>[1]</sup>   |  |  |
|                                 | Oral (rat) LD50: >2000 mg/kg <sup>[1]</sup>   | İ  |  |
|                                 | TOXICITY  | IRRITATION   |  |
| mineral oil                     | Not Available   | Not Available  |  |
|                                 | TOXICITY  | IRRITATION   |  |
| nonylated diphenylamines        | Oral (rat) LD50: >5000 mg/kg <sup>[2]</sup>   | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |  |
|                                 |   | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |  |
| Legend:                         | Nalue obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances |  |  |
|                                 | ·   |  |  |

The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives;

- The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since:
- The adverse effects of these materials are associated with undesirable components, and
- The levels of the undesirable components are inversely related to the degree of processing;
   Distillate base oils receiving the same degree or extent of processing will have similar toxicities;
- The potential toxicity of residual base oils is independent of the degree of processing the oil receives.
- The reproductive and developmental toxicity of the distillate base oils is inversely related to the degree of processing.

PARAFFINIC DISTILLATE, HEAVY, HYDROTREATED (SEVERE) Unrefined & mildly refined distillate base oils contain the highest levels of undesirable components, have the largest variation of hydrocarbon molecules and have shown the highest potential cancer-causing and mutation-causing activities. Highly and severely refined distillate base oils are produced from unrefined and mildly refined oils by removing or transforming undesirable components. In comparison to unrefined and mildly refined base oils, the highly and severely refined distillate base oils have a smaller range of hydrocarbon molecules and have demonstrated very low mammalian toxicity. Testing of residual oils for mutation-causing and cancer-causing potential has shown negative results, supporting the belief that these materials lack biologically active components or the components are largely non-bioavailable due to their molecular size. Toxicity testing has consistently shown that lubricating base oils have low acute toxicities.

For highly and severely refined distillate base oils:

In animal studies, the acute, oral, semilethal dose is >5g/kg body weight and the semilethal dose by skin contact is >2g/kg body weight. The semilethal concentration for inhalation is 2.18 to >4 mg/L. The materials have varied from "non-irritating" to "moderately irritating" when tested for skin and eye irritation. Testing for sensitisation has been negative.

The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing

1-DECENE, TRIMERS, HYDROGENATED

No significant acute toxicological data identified in literature search.

MINERAL OIL

Toxicity and Irritation data for petroleum-based mineral oils are related to chemical components and vary as does the composition and source of the original crude.

A small but definite risk of occupational skin cancer occurs in workers exposed to persistent skin contamination by oils over a period of years.

This risk has been attributed to the presence of certain polycyclic aromatic hydrocarbons (PAH) (typified by benz[a]pyrene). Petroleum oils which are solvent refined/extracted or severely hydrotreated, contain very low concentrations of both.

NONYLATED DIPHENYLAMINES

Heating of substituted diphenylamines may generate vapours which can irritate the eyes and airways. Drying of skin and mucous membranes leading to irritation may occur with prolonged or repeated contact. Overexposure may cause skin and airway irritation with dizziness and flu-like symptoms. All show a slight to very low order of toxicity following oral or topical administration.

| Acute Toxicity                    | × | Carcinogenicity          | X |
|-----------------------------------|---|--------------------------|---|
| Skin Irritation/Corrosion         | X | Reproductivity           | X |
| Serious Eye Damage/Irritation     | ✓ | STOT - Single Exposure   | × |
| Respiratory or Skin sensitisation | × | STOT - Repeated Exposure | × |
| Mutagenicity                      | × | Aspiration Hazard        | X |

Legend:

➤ - Data either not available or does not fill the criteria for classification

Data available to make classification

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### Toxicity

| 2004 ODEOLAL TEO V 014 00                              | ENDPOINT         | TEST DURATION (HR) | SPECIES   | VALUE            | SOURC            |
|--|------------------|--------------------|---|------------------|------------------|
| 0204 SPECIAL TEC V 0W-30<br>5L                         | Not<br>Available | Not Available      | Not Available   | Not<br>Available | Not<br>Available |
|  | ENDPOINT         | TEST DURATION (HR) | SPECIES   | VALUE            | SOURC            |
|  | LC50             | 96                 | Fish  | >100mg/L         | 2                |
| paraffinic distillate, heavy,<br>hydrotreated (severe) | EC50             | 48                 | Crustacea   | >10-mg/L         | 2                |
| nyurotreateu (severe)                                  | EC50             | 96                 | Algae or other aquatic plants   | >1000mg/L        | 1                |
|  | NOEC             | 504                | Crustacea   | >1mg/L           | 1                |
|  | ENDPOINT         | TEST DURATION (HR) | SPECIES   | VALUE            | SOURC            |
| 1-decene, trimers,<br>hydrogenated                     | Not<br>Available | Not Available      | Not Available   | Not<br>Available | Not<br>Availabl  |
|  | ENDPOINT         | TEST DURATION (HR) | SPECIES   | VALUE            | SOURC            |
| mineral oil  | Not<br>Available | Not Available      | Not Available   | Not<br>Available | Not<br>Availabl  |
|  | ENDPOINT         | TEST DURATION (HR) | SPECIES   | VALUE            | SOURC            |
|  | LC50             | 96                 | Fish  | >100mg/L         | 2                |
| nonylated diphenylamines                               | EC50             | 48                 | Crustacea   | 51mg/L           | 2                |
|  | EC50             | 72                 | Algae or other aquatic plants   | >100mg/L         | 2                |
|  | NOEC             | 96                 | Crustacea   | <10mg/L          | 1                |
| Legend:  |                  |                    | A Registered Substances - Ecotoxicological Informat<br>S EPA, Ecotox database - Aquatic Toxicity Data 5. Ec |                  |                  |

DO NOT discharge into sewer or waterways.

### Persistence and degradability

| Ingredient                      | Persistence: Water/Soil | Persistence: Air |
|---------------------------------|-------------------------|------------------|
| 1-decene, trimers, hydrogenated | LOW                     | LOW              |

# Bioaccumulative potential

| Ingredient                      | Bioaccumulation        |
|---------------------------------|------------------------|
| 1-decene, trimers, hydrogenated | LOW (LogKOW = 15.0744) |

### Mobility in soil

| Ingredient                      | Mobility              |
|---------------------------------|-----------------------|
| 1-decene, trimers, hydrogenated | LOW (KOC = 357700000) |

## **SECTION 13 DISPOSAL CONSIDERATIONS**

### Waste treatment methods

- ► DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

Product / Packaging disposal

Where in doubt contact the responsible authority.

- ▶ Recycle wherever possible or consult manufacturer for recycling options.
- ► Consult State Land Waste Authority for disposal.
- ▶ Bury or incinerate residue at an approved site.
- ▶ Recycle containers if possible, or dispose of in an authorised landfill.

### **SECTION 14 TRANSPORT INFORMATION**

## Labels Required

Marine Pollutant NO

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

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### **SECTION 15 REGULATORY INFORMATION**

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

PARAFFINIC DISTILLATE, HEAVY, HYDROTREATED (SEVERE) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

1-DECENE, TRIMERS, HYDROGENATED IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

MINERAL OIL IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

NONYLATED DIPHENYLAMINES IS FOUND ON THE FOLLOWING REGULATORY LISTS

Not Applicable

### **Federal Regulations**

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

### SECTION 311/312 HAZARD CATEGORIES

| Gas under pressure         No           Explosive         No           Self-heating         No           Pyrophoric (Liquid or Solid)         No           Pyrophoric Cas         No           Corrosive to metal         No           Oxidizer (Liquid, Solid or Gas)         No           Oxidizer (Liquid, Solid or Gas)         No           Organic Peroxide         No           Self-reactive         No           In contact with water emits flammable gas         No           Combustible Dust         No           Carcinogenicity         No           Acute toxicity (any route of exposure)         No           Reproductive toxicity         No           Skin Corrosion or Irritation         No           Serious eye damage or eye irritation         No           Serious eye damage or eye irritation         No           Specific target organ toxicity (single or repeated exposure)         No           Aspiration Hazard         No           Germ cell mutagenicity         No           Simple Asphyxiant         No   |  | I  |
|--|--|----|
| Explosive         No           Self-heating         No           Pyrophoric (Liquid or Solid)         No           Pyrophoric Gas         No           Corrosive to metal         No           Oxidizer (Liquid, Solid or Gas)         No           Organic Peroxide         No           Self-reactive         No           In contact with water emits flammable gas         No           Combustible Dust         No           Carcinogenicity         No           Acute toxicity (any route of exposure)         No           Reproductive toxicity         No           Skin Corrosion or Irritation         No           Respiratory or Skin Sensitization         No           Serious eye damage or eye irritation         No           Specific target organ toxicity (single or repeated exposure)         No           Aspiration Hazard         No           Germ cell mutagenicity         No           Simple Asphyxiant         No   | Flammable (Gases, Aerosols, Liquids, or Solids)              | No |
| Self-heating         No           Pyrophoric (Liquid or Solid)         No           Pyrophoric Gas         No           Corrosive to metal         No           Oxidizer (Liquid, Solid or Gas)         No           Organic Peroxide         No           Self-reactive         No           In contact with water emits flammable gas         No           Combustible Dust         No           Carcinogenicity         No           Acute toxicity (any route of exposure)         No           Reproductive toxicity         No           Skin Corrosion or Irritation         No           Respiratory or Skin Sensitization         No           Serious eye damage or eye irritation         No           Specific target organ toxicity (single or repeated exposure)         No           Aspiration Hazard         No           Germ cell mutagenicity         No           Simple Asphyxiant         No  | Gas under pressure   | No |
| Pyrophoric (Liquid or Solid)         No           Pyrophoric Gas         No           Corrosive to metal         No           Oxidizer (Liquid, Solid or Gas)         No           Organic Peroxide         No           Self-reactive         No           In contact with water emits flammable gas         No           Combustible Dust         No           Carcinogenicity         No           Acute toxicity (any route of exposure)         No           Reproductive toxicity         No           Skin Corrosion or Irritation         No           Respiratory or Skin Sensitization         No           Serious eye damage or eye irritation         No           Specific target organ toxicity (single or repeated exposure)         No           Aspiration Hazard         No           Germ cell mutagenicity         No           Simple Asphyxiant         No  | Explosive  | No |
| Pyrophoric Gas         No           Corrosive to metal         No           Oxidizer (Liquid, Solid or Gas)         No           Organic Peroxide         No           Self-reactive         No           In contact with water emits flammable gas         No           Combustible Dust         No           Carcinogenicity         No           Acute toxicity (any route of exposure)         No           Reproductive toxicity         No           Skin Corrosion or Irritation         No           Respiratory or Skin Sensitization         No           Serious eye damage or eye irritation         No           Specific target organ toxicity (single or repeated exposure)         No           Aspiration Hazard         No           Germ cell mutagenicity         No           Simple Asphyxiant         No  | Self-heating   | No |
| Corrosive to metal No Oxidizer (Liquid, Solid or Gas) No Organic Peroxide No Self-reactive No In contact with water emits flammable gas No Combustible Dust No Carcinogenicity No Acute toxicity (any route of exposure) No Reproductive toxicity No Respiratory or Skin Sensitization No Serious eye damage or eye irritation No Specific target organ toxicity (single or repeated exposure) No Aspiration Hazard No Simple Asphyxiant No Simple Asphyxiant No Serious eye dashed to make the simple of the simple of the simple Asphyxiant No Simple Asphyxiant No Serious eye dashed to make the simple of | Pyrophoric (Liquid or Solid)                                 | No |
| Oxidizer (Liquid, Solid or Gas) Organic Peroxide No Self-reactive No In contact with water emits flammable gas No Combustible Dust No Carcinogenicity No Acute toxicity (any route of exposure) No Reproductive toxicity No Skin Corrosion or Irritation No Respiratory or Skin Sensitization No Serious eye damage or eye irritation No Specific target organ toxicity (single or repeated exposure) No Aspiration Hazard No Germ cell mutagenicity No Simple Asphyxiant No   | Pyrophoric Gas   | No |
| Organic Peroxide Self-reactive No Self-reactive No In contact with water emits flammable gas No Combustible Dust No Carcinogenicity No Acute toxicity (any route of exposure) No Skin Corrosion or Irritation No Respiratory or Skin Sensitization No Serious eye damage or eye irritation No Specific target organ toxicity (single or repeated exposure) No Aspiration Hazard Germ cell mutagenicity No Simple Asphyxiant  | Corrosive to metal   | No |
| Self-reactive No In contact with water emits flammable gas No Combustible Dust No Carcinogenicity No Acute toxicity (any route of exposure) No Skin Corrosion or Irritation No Respiratory or Skin Sensitization No Serious eye damage or eye irritation No Sepicific target organ toxicity (single or repeated exposure) No Aspirator Hazard No Germ cell mutagenicity No Simple Asphyxiant No  | Oxidizer (Liquid, Solid or Gas)                              | No |
| In contact with water emits flammable gas  Combustible Dust  No  Carcinogenicity  No  Acute toxicity (any route of exposure)  Reproductive toxicity  No  Skin Corrosion or Irritation  Respiratory or Skin Sensitization  Serious eye damage or eye irritation  Specific target organ toxicity (single or repeated exposure)  No  Aspiration Hazard  No  Germ cell mutagenicity  No  Simple Asphyxiant  No   | Organic Peroxide   | No |
| Combustible Dust Carcinogenicity No Acute toxicity (any route of exposure) No Reproductive toxicity No Skin Corrosion or Irritation Respiratory or Skin Sensitization No Serious eye damage or eye irritation No Specific target organ toxicity (single or repeated exposure) No Aspiration Hazard No Germ cell mutagenicity No Simple Asphyxiant No   | Self-reactive  | No |
| Carcinogenicity Acute toxicity (any route of exposure) Reproductive toxicity No Skin Corrosion or Irritation Respiratory or Skin Sensitization Respiratory or skin Sensitization No Serious eye damage or eye irritation No Specific target organ toxicity (single or repeated exposure) No Aspiration Hazard No Germ cell mutagenicity No Simple Asphyxiant   | In contact with water emits flammable gas                    | No |
| Acute toxicity (any route of exposure)  Reproductive toxicity  No  Skin Corrosion or Irritation  Respiratory or Skin Sensitization  Serious eye damage or eye irritation  No  Specific target organ toxicity (single or repeated exposure)  Aspiration Hazard  No  Germ cell mutagenicity  No  Simple Asphyxiant   | Combustible Dust   | No |
| Reproductive toxicity  Skin Corrosion or Irritation  Respiratory or Skin Sensitization  No  Serious eye damage or eye irritation  No  Specific target organ toxicity (single or repeated exposure)  Aspiration Hazard  No  Germ cell mutagenicity  No  Simple Asphyxiant   | Carcinogenicity  | No |
| Skin Corrosion or Irritation  Respiratory or Skin Sensitization  No Serious eye damage or eye irritation  Specific target organ toxicity (single or repeated exposure)  Aspiration Hazard  No Germ cell mutagenicity  No Simple Asphyxiant   | Acute toxicity (any route of exposure)                       | No |
| Respiratory or Skin Sensitization  Serious eye damage or eye irritation  Specific target organ toxicity (single or repeated exposure)  Aspiration Hazard  No  Germ cell mutagenicity  No  Simple Asphyxiant  | Reproductive toxicity  | No |
| Serious eye damage or eye irritation  Specific target organ toxicity (single or repeated exposure)  Aspiration Hazard  No  Germ cell mutagenicity  No  Simple Asphyxiant  No   | Skin Corrosion or Irritation                                 |    |
| Specific target organ toxicity (single or repeated exposure)  Aspiration Hazard  No  Germ cell mutagenicity  No  Simple Asphyxiant  No   | Respiratory or Skin Sensitization                            |    |
| Aspiration Hazard No Germ cell mutagenicity No Simple Asphyxiant No  | Serious eye damage or eye irritation                         | No |
| Germ cell mutagenicity  No Simple Asphyxiant  No   | Specific target organ toxicity (single or repeated exposure) | No |
| Simple Asphyxiant No   | Aspiration Hazard  | No |
| , , ,  | Germ cell mutagenicity                                       | No |
| Hazards Not Otherwise Classified No  | Simple Asphyxiant  | No |
|  | Hazards Not Otherwise Classified                             |    |

## US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

# State Regulations

# US. CALIFORNIA PROPOSITION 65

None Reported

### **National Inventory Status**

| National inventory Status     |  |  |  |
|-------------------------------|--|--|--|
| National Inventory            | Status   |  |  |
| Australia - AICS              | No (1-decene, trimers, hydrogenated)   |  |  |
| Canada - DSL                  | No (1-decene, trimers, hydrogenated)   |  |  |
| Canada - NDSL                 | No (paraffinic distillate, heavy, hydrotreated (severe); nonylated diphenylamines) |  |  |
| China - IECSC                 | Yes  |  |  |
| Europe - EINEC / ELINCS / NLP | Yes  |  |  |
| Japan - ENCS                  | No (1-decene, trimers, hydrogenated)   |  |  |
| Korea - KECI                  | Yes  |  |  |
| New Zealand - NZIoC           | Yes  |  |  |
| Philippines - PICCS           | No (1-decene, trimers, hydrogenated)   |  |  |
| USA - TSCA                    | Yes  |  |  |
| Taiwan - TCSI                 | Yes  |  |  |
| Mexico - INSQ                 | No (nonylated diphenylamines; 1-decene, trimers, hydrogenated)                     |  |  |

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| Vietnam - NCI  | Yes   |  |
|----------------|---|--|
| Russia - ARIPS | No (1-decene, trimers, hydrogenated)  |  |
| Legend:        | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |  |

### **SECTION 16 OTHER INFORMATION**

| Revision Date | 01/11/2019 |
|---------------|------------|
| Initial Date  | 01/08/2016 |

### **SDS Version Summary**

| Version | Issue Date | Sections Updated   |
|---------|------------|--|
| 3.1.1.1 | 01/11/2019 | One-off system update. NOTE: This may or may not change the GHS classification |

### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### **Definitions and abbreviations**

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value

BCF: BioConcentration Factors BEI: Biological Exposure Index

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