

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

| 1.1. Product identifier | |
|--|---|
| Trade name or designation of the mixture | Transmission Oil SE |
| Registration number | - |
| Synonyms | None. |
| SDS number | 7993 |
| Product code | Ford Internal Ref.: 180421 |
| Issue date | 29-August-2014 |
| Version number | 3.0 |
| Revision date | 18-May-2015 |
| Supersedes date | 29-August-2014 |
| Product use | Public use |
| 1.2. Relevant identified uses of | the substance or mixture and uses advised against |
| Identified uses | Transmission oil. Hydraulic fluid |
| Uses advised against | None known. |
| 1.3. Details of the supplier of the | e safety data sheet |
| Company name | Ford Motor Company Ltd. |
| Address | Parts Distribution Centre |
| | Royal Oak Way South |
| | NN11 8NT Daventry, Northants |
| | United Kingdom |
| Telephone number | +44 1327 305 198 |
| Address | Ford-Werke GmbH |
| | Edsel-Ford-Str. 2-14 |
| | 50769 Köln |
| | Germany |
| Telephone number | +49 221 90-33333 |
| E-mail | HSE@rle.de |
| 1.4 Emergency telephone number | +49 (0) 6132-84463 (GBK GmbH – 24/7) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification R43

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

| Serious eye damage/eye irritation | Category 2 | H319 - Causes serious eye irritation. |
|-----------------------------------|------------|---|
| Skin sensitisation | Category 1 | H317 - May cause an allergic skin reaction. |

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:

Polysulfides, Di-tert-bu, Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl

Hazard pictograms Signal word Warning Hazard statements May cause an allergic skin reaction. H317 Causes serious eye irritation. H319 **Precautionary statements** Prevention Keep out of reach of children. P102 Wear protective gloves/eye protection/face protection. P280 Response If medical advice is needed, have product container or label at hand. P101 IF ON SKIN: Wash with plenty of water. P302 + P352 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present P305 + P351 + P338 and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. P308 + P313 None. Storage Disposal Dispose of contents/container to an approved waste disposal plant P501 Supplemental label information None. 2.3. Other hazards The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| General | information |
|---------|-------------|

| Chemical name | | % | CAS-No. / EC No. | REACH Registration No. | Index No. | Notes |
|---|-----------------------------|--|-------------------------|----------------------------------|-----------|--|
| Highly refined paraffinic synthetic oils | : mineral | and 70 - 85 | * - | - | ** | Note L |
| Classification: | DSD: | Carc. Cat. 2;R45 | | | | |
| | CLP: | Carc. 1B;H350 | | | | |
| Polysulfides, Di-tert-bu | | 1 - < 3 | 68937-96-2 273-103-3 | - | - | |
| Classification: | DSD: | R43, R53 | | | | |
| | CLP: | Skin Sens. 1;H31 | 7, Aquatic Chroni | c 4;H413 | | |
| Reaction products of 4-methyl-2-pentanol an diphosphorus pentasulf propoxylated, esterified diphosphorus pentaoxic by amines, C12-14- tert | fide, With de, and sa | 0.5 - 1.2 alted | N/A 931-384-6 | 01-2119493620-38-XXXX | - | Eye Dam 1:> 50 - <= 100, R41: > 50 - <= 100 |
| Classification: DSD: | | Xn;R22, Xi;R41, | R43, N;R51/53 | | | |
| | CLP: | Flam. Liq. 3;H220 Aguatic Chronic 2 | | 302, Skin Sens. 1;H317, Eye Dam. | 1;H318, | |

List of abbreviations and symbols that may be used above: CLP: Regulation No. 1272/2008. DSD: Directive 67/548/EEC. Note: Regulation No. 1272/2008 - Annex VI

* Contains one or more of the following CAS-numbers (REACH registration numbers): 101316-72-7 (-), 74869-22-0 (-), 92045-45-9 (-), 68037-01-4 (-)

** Contains one or more of the following Index numbers (REACH registration numbers): 649-530-00-X (-), 649-484-00-0 (-)

Composition comments

The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. | |
|---|---|--|
| 4.1. Description of first aid measured | sures | |
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. | |
| Skin contact | Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists. | |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. | |
| Ingestion | Rinse mouth. Do not induce vomiting without medical advice. Get medical attention if symptoms occur. | |
| 4.2. Most important symptoms and effects, both acute and delayed | Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. May cause respiratory irritation. | |
| 4.3. Indication of any immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. | |
| | | |

SECTION 5: Firefighting measures

| General fire hazards | No unusual fire or explosion hazards noted. |
|---|---|
| 5.1. Extinguishing media Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| 5.2. Special hazards arising from the substance or mixture | During fire, gases hazardous to health may be formed. Sulphur oxides. Carbon oxides. Oxides of phosphorus. Nitrogen oxides (NOx). |
| 5.3. Advice for firefighters | |
| Special protective equipment for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Special fire fighting procedures | Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply. |

SECTION 6: Accidental release measures

| 6.1. Personal precautions, protection | ctive equipment and emergency procedures |
|--|--|
| For non-emergency personnel | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8. |
| For emergency responders | Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS. |
| 6.2. Environmental precautions | Avoid discharge into drains, water courses or onto the ground. |
| 6.3. Methods and material for containment and cleaning up | The product is immiscible with water and will spread on the water surface. |
| | Large Spills: Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Prevent entry into waterways, sewer, basements or confined areas. |
| | Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Cover with plastic sheet to prevent spreading. |
| | Never return spills to original containers for re-use. |
| 6.4. Reference to other sections | For personal protection, see section 8. For waste disposal, see section 13 of the SDS. |

SECTION 7: Handling and storage

| 7.1. Precautions for safe handling | Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
|---|---|
| 7.2. Conditions for safe storage, including any incompatibilities | Keep away from heat, sparks and open flame. Store in original tightly closed container. |
| 7.3. Specific end use(s) | Transmission oil |

Material name: Transmission Oil SE

SECTION 8: Exposure controls/personal protection

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C

| 8.1. Control parameters | | | | |
|---|------------------------------------|-------------------|----------------------|-------|
| Occupational exposure limits | | | | |
| United Kingdom Components | Туре | | Value | Form |
| Mineral oil | STEL | | 10 mg/m3 | Mist. |
| | TWA | | 5 mg/m3 | Mist. |
| Biological limit values | No biological exposure limits not | ed for the ingred | ient(s). | |
| Recommended monitoring procedures | Follow standard monitoring proce | edures. | | |
| Derived no-effect level (DNEL) Components | Туре | Route | Value | Form |
| Reaction products of 4-meth and diphosphorus pentasulf propoxylated, esterified with pentaoxide, and salted by a tert-alkyl | ide, diphosphorus | Dermal | 0.0235 mg/cm2 | |
| Comments: St | nort term exposure - local effects | | | |
| | | Dermal | 6.25 mg/kg/BW/day | |
| Comments: Lo | ong term exposure systemic effects | | | |
| Comments: Lo | ong term exposure systemic effects | Inhalation | 2.2 mg/m3 | |
| | | Oral | 0.25 mg/kg/BW/day | |
| Comments: Lo | ong term exposure systemic effects | | | |
| | Professional | Dermal | 12.5 mg/kg/BW/day | |
| Comments: Lo | ong term exposure systemic effects | | | |

Inhalation

8.56 mg/m3

Comments: Long term exposure systemic effects

Predicted no effect concentrations (PNECs)

| Components | | Туре | Route | Value | Form |
|--|--------------------------------|---|---------------------------------------|--|---|
| Reaction products of 4- and diphosphorus pent propoxylated, esterifiec pentaoxide, and salted tert-alkyl | asulfide, with diphosphorus | Not applicable | Freshwater | 0.0012 mg/l | |
| | | | Oral | 10 mg/kg | |
| Comments: | Feed (oral) | | | | |
| | | | Seawater | 0.12 μg/l | |
| | | | Sediment | 3.13 mg/kg | |
| Comments: | Freshwater | | | | |
| | | | Sediment | 0.313 mg/kg | |
| Comments: | Seawater | | | | |
| | | | Soil | 2.54 mg/kg | |
| | | | STP | 24.33 mg/l | |
| | | | Water | 0.064 mg/l | |
| Comments: | Intermittent releas | e | | | |
| 8.2. Exposure controls | | | | | |
| Appropriate engineering controls | should be m or other eng | atched to conditions neering controls to r its have not been es | . If applicable, us maintain airborne | e process enclosur levels below recor | be used. Ventilation rates res, local exhaust ventilation, nmended exposure limits. If to an acceptable level. Provide |
| Individual protection mea | sures, such as pers | onal protective equ | upment | | |
| General information | Use persona | l protective equipme | ent as required. P | | equipment should be chosen of the personal protective |
| Eye/face protection | Face shield | s recommended. W | ear safety glasse | s with side shields | (or goggles). |

| Skin protection | |
|------------------------------------|---|
| - Hand protection | Nitrile rubber |
| | Glove thickness 0.4 mm. Break through time >= 480 min |
| | Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product. |
| | Hand protection in case of splash contact: Nitrile rubber |
| | Glove thickness 0.4 mm. Break through time >= 480 min. |
| | Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product. |
| | The protective gloves to be used must comply with the specification of EU directive 89/686/EC and the resultant standard EN374. The above given information is based on laboratory test in line with EN374. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove. |
| - Other | Wear appropriate chemical resistant clothing. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| Hygiene measures | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. |
| Environmental exposure controls | Environmental manager must be informed of all major releases. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance | Viscous. Liquid. |
|--|-----------------------------------|
| Physical state | Liquid. |
| Form | Liquid. |
| Colour | Not available. |
| Odour | Not available. |
| Odour threshold | Not available. |
| рН | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | > 300 °C (> 572 °F) ASTM D 1120 |
| Flash point | > 180.0 °C (> 356.0 °F) ASTM D 92 |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not applicable. |
| Upper/lower flammability or exp | losive limits |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Vapour pressure | Not available. |
| Vapour density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Insoluble |
| Solubility (other) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |

| Decomposition temperature | Not available. |
|---------------------------|--------------------------------|
| Viscosity | Not available. |
| Explosive properties | Not explosive |
| Oxidizing properties | Not available. |
| 9.2. Other information | |
| Density | 0.87 g/cm3 @ 15 °C ASTM D 4052 |
| Kinematic viscosity | 11.5 cSt (ASTM D 445) @ 100 °C |
| VOC (EU) | 0 % |
| VOC (CH) | < 3 % |

SECTION 10: Stability and reactivity

| 10.1. Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
|---|--|
| 10.2. Chemical stability | Material is stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| 10.4. Conditions to avoid | Contact with incompatible materials. Direct sources of heat. Temperatures exceeding the flash point. |
| 10.5. Incompatible materials | Strong acids, alkalies and oxidizing agents. |
| 10.6. Hazardous decomposition products | Carbon dioxide, carbon monoxide, oxides of sulfur and nitrogen. |

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| SECTION 11: Toxicologica | al information | | |
|---|---|---|--|
| General information | Occupational exposure to the substance or mixture may cause adverse effects. | | |
| Information on likely routes of e | exposure | | |
| Inhalation | Prolonged inhalation may be harmful. | Prolonged inhalation may be harmful. | |
| Skin contact | May cause an allergic skin reaction. | | |
| Eye contact | Causes serious eye irritation. | | |
| Ingestion | May cause discomfort if swallowed. | | |
| Symptoms | Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. May cause respiratory irritation. | | |
| 11.1. Information on toxicologic | al effects | | |
| Acute toxicity | Based on available data, the classification cr | iteria are not met. | |
| Product | Species | Test results | |
| Transmission Oil SE | | | |
| <u>Acute</u> | | | |
| Oral | | | |
| | | > 5000 mg/kg (calcd. ATE) | |
| | | | |
| Components | Species | Test results | |
| • | pentanol and diphosphorus pentasulfide, propo- | Test results kylated, esterified with diphosphorus pentaoxide, and | |
| Reaction products of 4-methyl-2-p | pentanol and diphosphorus pentasulfide, propo- | | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral | pentanol and diphosphorus pentasulfide, propo- | xylated, esterified with diphosphorus pentaoxide, and | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-all <u>Acute</u> | pentanol and diphosphorus pentasulfide, propo- | | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral | pentanol and diphosphorus pentasulfide, propos yl | kylated, esterified with diphosphorus pentaoxide, and 2000 mg/kg (OECD 401) | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral LD50 | pentanol and diphosphorus pentasulfide, proposity | kylated, esterified with diphosphorus pentaoxide, and 2000 mg/kg (OECD 401) | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral LD50 Skin corrosion/irritation Serious eye damage/eye | Pentanol and diphosphorus pentasulfide, proposity International Additional Additional Additional Addition Creater Addition Addition Creater Ad | kylated, esterified with diphosphorus pentaoxide, and 2000 mg/kg (OECD 401) iteria are not met. | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral LD50 Skin corrosion/irritation Serious eye damage/eye irritation | Rat Based on available data, the classification cr Causes serious eye irritation. | kylated, esterified with diphosphorus pentaoxide, and 2000 mg/kg (OECD 401) iteria are not met. | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral LD50 Skin corrosion/irritation Serious eye damage/eye irritation Respiratory sensitisation | Rat Based on available data, the classification cr Causes serious eye irritation. Based on available data, the classification cr | kylated, esterified with diphosphorus pentaoxide, and 2000 mg/kg (OECD 401) iteria are not met. iteria are not met. le persons. | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral LD50 Skin corrosion/irritation Serious eye damage/eye irritation Respiratory sensitisation Skin sensitisation | Rat Based on available data, the classification cr Causes serious eye irritation. Based on available data, the classification cr May cause allergic skin reaction in susceptib Based on available data, the classification cr | kylated, esterified with diphosphorus pentaoxide, and 2000 mg/kg (OECD 401) iteria are not met. iteria are not met. le persons. | |
| Reaction products of 4-methyl-2-p salted by amines, C12-14- tert-alk <u>Acute</u> Oral LD50 Skin corrosion/irritation Serious eye damage/eye irritation Respiratory sensitisation Skin sensitisation Germ cell mutagenicity | Rat Based on available data, the classification cr Causes serious eye irritation. Based on available data, the classification cr May cause allergic skin reaction in susceptib Based on available data, the classification cr All hydrocarbons in this mixture: Note L is ap | kylated, esterified with diphosphorus pentaoxide, and 2000 mg/kg (OECD 401) iteria are not met. iteria are not met. le persons. iteria are not met. plicable (DMSO <3%), therefore no classification as | |

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

Specific target organ toxicity -

repeated exposure

| Aspiration hazard | Based on available data, the classification criteria are not met. |
|---|---|
| Mixture versus substance information | No information available. |
| Other information | Not available. |

SECTION 12: Ecological information

| 12.1. Toxicity | | | |
|--|--|--|---|
| Components | | Species | Test results |
| Reaction products of 4-methyl-2-posalted by amines, C12-14- tert-alky | | phosphorus pentasulfide, propoxylated, es | sterified with diphosphorus pentaoxide, and |
| Acute | | | |
| Other | EC50 | Pseudokirchnerella subcapitata | 6.4 mg/l, 48 hours (OECD 201) |
| Aquatic | | | |
| Acute | | - | |
| Crustacea | EC50 | Daphnia magna | 91.4 mg/l, 48 hours (OECD 202) |
| Fish | LC50 | Pimephales promelas | 8.5 mg/l, 96 hours (OECD 203) |
| 12.2. Persistence and degradability | Not expecte | d to be rapidly biodegradable. | |
| Biodegradability Percent degradation (Ae Reaction products of 4-m diphosphorus pentasulfid diphosphorus pentaoxide C12-14- tert-alkyl | ethyl-2-pentar e, propoxylate | nol and 3.6 % (ASTM D-5864-s d, esterified with Test Duration: 28 days | 95) |
| 12.3. Bioaccumulative potential | No data ava | ilable. | |
| Partition coefficient n-octanol /water (log Kow) | Not available | 9. | |
| 12.4. Mobility in soil | Spillages may penetrate the soil causing ground water contamination. | | |
| 12.5. Results of PBT and vPvB assessment | The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance. | | |
| 12.6. Other adverse effects | | verse environmental effects (e.g. ozone de docrine disruption, global warming potenti | |

SECTION 13: Disposal considerations

| 13.1. Waste treatment methods | |
|-------------------------------|--|
| Residual waste | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |
| EU waste code | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| | 13 01 11 15 01 10 |
| Disposal methods/information | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Do not allow this material to drain into sewers/water supplies. |
| Special precautions | Dispose in accordance with all applicable regulations. |

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations Not applicable. **Restrictions on use** Not applicable. Other regulations The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. EU Directive 96/82/EC - Control of Major Accident Hazards: Threshold quantities established for the application of Articles 6 and 7 Not applicable VOC (EU): 0% Young people under 18 years old are not allowed to work with this product according to EU National regulations Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents. No Chemical Safety Assessment has been carried out. 15.2. Chemical safety assessment **SECTION 16: Other information** List of abbreviations vPvB: very persistent and very bioaccumulative substance. PBT: persistent, bioaccumulative and toxic substance. AC: Article category. acc., acc.to: according, according to. ACGIH: American Conference of Governmental Industrial Hygienists. AFNOR: French Institute for Standards (Association Française de Normalisation). ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures). ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des merchandises dangereuses par route). AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert - Germany). AICS: Australian Inventory of Chemical Substances. ANSI: American National Standards Institute. AOEL: Acceptable Operator Exposure Level. AOX: adsorbable organic halogen compounds. approx .: approximately. ASTM: ASTM International. ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP). BAM: Federal Institute for Materials Research and Testing, Germany (Bundesanstalt für Materialforschung und -prüfung). Maximum permissible concentration of biological working substances (BAT: Biologische Arbeitsstofftoleranzwerte). BAuA: Federal Institute for Occupational Health and Safety, Germany (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin). BCF: Bio-concentration factor. BET: Brunauer-Emmett-Teller. BLV: Biological Limit Value. BLV: Biological Limit Value (BGW: Biologischer Grenzwert, Austria). BMGV: Biological Monitoring Guidance Value (EH40.UK). BSI: British Standards Institution. BS: British Standard. BOD5: Biochemical oxygen demand within 5 days. BOD: Biochemical oxygen demand. bw: Body weight. calcd.: calculated. CAS: Chemical Abstract Service. CEN: European Committee for Standardization (Comité Européen de Normalisation). CESIO: European Committee on Organic Surfactants and their Intermediates (Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques). ChemRRV: Ordinance on the risk reduction related to chemical products (ChemRRV: Chemikalien-Risikoreduktions-verordnung, Switzerland). CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification,

CNS: Central Nervous System.

labeling and packaging of substances and mixtures.

CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction.

CNT: Carbon nanotubes. COD: Chemical Oxygen Demand. CSA: Chemical Safety Assessment. CSR: Chemical Safety Report. DETEC: Swiss Federal Department of the Environment, Transport, Energy and Communications. DIN: German Standards Institute / German industrial norm (Deutsches Institut für Normung / Deutsche Industrienorm). DMEL: Derived Minimum Effect Level. DNEL: Derived No Effect Level. DOC: Dissolved organic carbon. DPD: Directive 1999-45-EC / Dangerous Preparations Directive. DSD: Directive 67/548-EC / Dangerous Substances Directive. DSL: Canada, Domestic Substances List. DU: Downstream User. dw: dry weight. e.g.: For example, for instance. EBW: Exposure Based Waiving. EC: European Community. EC50: Effective Concentration 50%. ECHA: European Chemical Agency. EINECS: European Inventory of Existing Commercial Chemical Substances. ELINCS: European List of Notified Chemical Substances. EN: European norm. ENCS: Japan, Inventory of Existing and New Chemical Substances. EPA: United States Environmental Protection Agency. ERC: Environmental release category. ES: Exposure scenario. EUSES: European Union System for the Evaluation of Substances. EWC/EWL: European Waste Catalogue. GCL: General concentration limit. gen.: general. GHS: Globally Harmonized System of Classification and Labeling of Chemicals. GLP: Good Laboratory Practice. GW/VL: Occupational exposure limit value. GW-kw: Occupational exposure limit value - short term. GW-M/VL-M: Occupational exposure limit value - "Ceiling". GWP: Global Warming Potential. HPV: High Production Volume Chemicals. HEPA: High Efficiency Particulate Air. IARC: International Agency for Research on Cancer. IATA: International Air Transport Association. IBC: Intermediate Bulk Container. IBC Code: International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk). ICAO: International Civil Aviation Organization. IC50: Inhibition Concentration 50%. IECSC: Inventory of Existing Chemical Substances in China. IMDG Code: International Maritime Dangerous Goods Code. IMO: International Maritime Organization. incl.: including, inclusive. ISO: International Standards Organization. IUCLID: International Uniform Chemical Information Database. IUPAC: International Union for Pure Applied Chemistry. KECI: Korea Existing Chemicals Inventory. LCA: Life Cycle Assessment. LC: Lethal Concentration. LC50: Lethal Concentration 50%. LCLo: Lowest published lethal concentration. LD50: Lethal Dose 50%. LEV: Local exhaust ventilation. LOAEL: Lowest observed adverse effect level. LOEC: Lowest observable effect concentration. LOEL: Lowest observable effect level. LPV: Low Production Volume Chemicals. LQ: Limited Quantities. Air Quality Control Regulation (LRV: Luftreinhalteverordnung, Switzerland). TLV-STEL: Threshold limit value - Short-term exposure limit / Technical reference concentration short-time value (TRK-Kzw = Technische Richtkonzentration - Kurzzeitwert).

Maximum allowable workplace concentration - instantaneous value (MAK-Mow: Maximale Arbeitsplatzkonzentration - Momentanwert, Austria) Maximum allowable workplace concentration - daily mean value / Technical standard concentration - daily mean value (MAK-Tmw, TRK-Tmw : Maximale Arbeitsplatzkonzentration -Tagesmittelwert / TRK-Tmw = Technische Richtkonzentration – Tagesmittelwert, Austria). MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG). MARPOL: International Convention for the Prevention of Pollution From Ships. MTD: Maximum tolerated dose. MWCNT: Multi-walled carbon nanotubes. n.a.: not applicable. N/A: Not available. n.d.: not determined. NLP: No Longer Polymers. NDSL: Canada, Non-Domestic Substances List. NF: French Norm (See AFNOR). NFPA: National Fire Protection Association. NIOSH: National Institute for Occupational Safety & Health. NOAEC: No Observed Adverse Effect Concentration. NOAEL: No observed adverse effect level. NOEC: No observed effect concentration. NOEL: No observed effect level. NTP: National Toxicology Program. NZIoC: New Zealand Inventory of Chemicals. **ODP: Ozone Depletion Potential.** OECD: Organization for Economic Cooperation and Development. OEL: Occupational Exposure Limit. org.: organic. OSHA: Occupational Safety & Health Administration. PAH: Polycyclic Aromatic Hydrocarbons. PBT: Persistent, bioaccumulative, toxic. PC: Product category. PE: Polyethylene. PEC: Predicted Environmental Concentration. PEL: Permissible Exposure Limit. PIC: Prior Informed Consent. PICCS: Philippines Inventory of Commercial Chemical Substances. PNEC: Predicted No Effect Concentration. POCP: Photochemical ozone creation potential (Photochemisches Ozonbildungspotenzial). POP: Persistent Organic Pollutant. PPORD: Product and Process Oriented Research and Development. PPE: Personal Protective Equipment. PROC: Process category. RA: Risk Assessment. RAR: Risk Assessment Report. RCRA: Resource Conservation Recovery Act. REACH: Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals). RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer). RMM: Risk Management Measure. RTECS: Registry of Toxic Effects of Chemical Substances. QSAR: Quantitative Structure Activity Relation. SARA: Superfund Amendments and Reauthorization Act. SADT: Self-Accelerating Decomposition Temperature. SCL: Specific concentration limit. SEA: socio economic analysis. STEL: Short-term Exposure Limit. STP: Sewage treatment plant. SU: Sector of use. SVHC: Substance of Very High Concern. SWCNT: single-walled carbon nanotubes. ThOD: Theoretical oxygen demand. TOC: Total Organic Carbon. TLV: Threshold Limit Value. TRA: Targeted Risk Assessment. TSCA: Toxic Substance Control Act. TWA: Time Weighted Average. UC: Use category.

| | UDS: Use descriptor system. UEC: Use and exposure categories. UN: United Nations. UN RTDG: United Nations Recommendations on the Transport of Dangerous Goods. UVCB: Unknown or Variable Composition, Complex Reaction Products, and Biological Materials. Regulation on combustible liquids (VbF: Verordnung über brennbare Flüssigkeiten, Austria). Regulation of the Austria Minister for Labor and Social Affairs regarding health surveillance at the workplace (VGÜ = Verordnung des Bundesministers für Arbeit und Soziales über die Gesundheitsüberwachung am Arbeitsplatz). VOC: Volatile organic compounds. vPvB: very Persistent, very Bioaccumulative. WEL-TWA: Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period). WEL-STEL: Workplace Exposure Limit-Short term exposure limit (15-minute reference period). WoE: Weight of evidence. WHMIS: Workplace Hazardous Materials Information System. WHO: World Health Organization. wwt: wet weight. |
|---|---|
| References | Not available. |
| Information on evaluation method leading to the classification of mixture | The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. |
| Full text of any statements or R-phrases and H-statements | |
| under Sections 2 to 15 | R22 Harmful if swallowed. R41 Risk of serious damage to eyes. R43 May cause sensitisation by skin contact. R45 May cause cancer. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R53 May cause long-term adverse effects in the aquatic environment. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H350 May cause cancer. H411 Toxic to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety. |
| Training information | Follow training instructions when handling this material. |
| Disclaimer | The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. |

Attachment to the Safety Data Sheet

| Product Name: | Transmission Oil SE |
|---------------------|---------------------|
| Ford Int. Ref. No.: | 180421 |



Page: 1/1 Print Date: 18.05.2015

Involved Products:

| Finiscode | Part number |
|-----------|-------------|
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1. 1 565 898 8U7J 7J106 AA

Container Size: