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

1.1. Product identifier
Trade name or designation of the mixture Rear Axle Oil SAE 90
Registration number -
Synonyms None.
SDS number 5187
Product code Ford Internal Ref: 108289
Issue date 23-September-2014
Version number 3.0
Revision date 12-August-2015
Supersedes date 24-March-2015
Product use Professional use

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses Transmission, Axle and Power Steering Fluids
Uses advised against None known.

1.3. Details of the supplier of the 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 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.

Environmental hazards
- Hazardous to the aquatic environment, long-term aquatic hazard Category 2
  H411 - Toxic to aquatic life with long lasting effects.

2.2. Label elements
Label according to Regulation (EC) No. 1272/2008 as amended
Contains: Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs, 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
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
Prevention
P280 Wear protective gloves/eye protection/face protection.
P273 Avoid release to the environment.

Response
P337 + P313 If eye irritation persists: Get medical advice/attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P391 Collect spillage.

Storage None.
Disposal None.

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>%</th>
<th>CAS-No. / EC No.</th>
<th>REACH Registration No.</th>
<th>Index No.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl</td>
<td>1 - &lt;3</td>
<td>N/A 931-384-6</td>
<td>01-2119493620-38-XXXX</td>
<td>-</td>
<td>UVCB, Eye Dam. 1: H318: C &gt; 50%</td>
</tr>
<tr>
<td>(Z)-octadec-9-enylamine</td>
<td>0.1 - &lt; 1</td>
<td>112-90-3 204-015-5</td>
<td>-</td>
<td>612-283-00-3</td>
<td>M(acute) = 10 M(chronic) = 10</td>
</tr>
<tr>
<td>Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs</td>
<td>0.1 - &lt; 1</td>
<td>N/A 939-460-0</td>
<td>-</td>
<td>-</td>
<td>UVCB</td>
</tr>
</tbody>
</table>

List of abbreviations and symbols that may be used above:
M: M-factor
UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials
N/A: Not available.

Composition comments
The full text for all 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. Discard any shoes or clothing items that cannot be decontaminated.

4.1. Description of first aid measures

Inhalation
If inhaled, remove to fresh air. Call a physician if symptoms develop or persist.
Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact
Rinse with water. Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed
Causes eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards
Not available.

5.1. Extinguishing media
Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Extinguishing media - large fires: Alcohol resistant foam.

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.

5.3. Advice for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special protective equipment for firefighters
In case of fire: Stop leak if safe to do so. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Water runoff can cause environmental damage.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
See Section 8 for personal protective equipment.

For non-emergency personnel
Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

For emergency responders
Avoid release to the environment. Refer to special instructions/safety data sheets. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

6.2. Environmental precautions
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 the spilled material, where this is possible and place into containers. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

6.3. Methods and material for containment and cleaning up

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
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.
Do not get this material in contact with eyes.
Do not empty into drains.

7.2. Conditions for safe storage, including any incompatibilities
Store in original tightly closed container.
Keep out of the reach of children.
Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)
Rear axle oil

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Occupational exposure limits
United Kingdom

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil</td>
<td>STEL</td>
<td>10 mg/m3</td>
<td>Mist.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Mist.</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures
Follow standard monitoring procedures.

Derived no-effect level (DNEL)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Route</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide,</td>
<td>Consumer</td>
<td>Dermal</td>
<td>0.0235 mg/cm2</td>
<td></td>
</tr>
<tr>
<td>propoxylated, esterified with diphosphorus pentaoxide, and salted by amines,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C12-14-tert-alkyl</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short term exposure - local effects</td>
<td></td>
<td>Dermal</td>
<td>6.25 mg/kg/BW/day</td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long term exposure systemic effects</td>
<td></td>
<td>Inhalation</td>
<td>2.2 mg/m3</td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long term exposure systemic effects</td>
<td></td>
<td>Oral</td>
<td>0.25 mg/kg/BW/day</td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td></td>
<td>Dermal</td>
<td>12.5 mg/kg/BW/day</td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long term exposure systemic effects</td>
<td></td>
<td>Inhalation</td>
<td>8.56 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

Predicted no effect concentrations (PNECs)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Route</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide,</td>
<td>Not applicable</td>
<td>Freshwater</td>
<td>0.0012 mg/l</td>
<td></td>
</tr>
<tr>
<td>propoxylated, esterified with diphosphorus pentaoxide, and salted by amines,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C12-14-tert-alkyl</td>
<td></td>
<td>Oral</td>
<td>10 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed (oral)</td>
<td></td>
<td>Seawater</td>
<td>0.12 µg/l</td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td>Sediment</td>
<td>3.13 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Freshwater</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td>Sediment</td>
<td>0.313 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Seawater</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td>Soil</td>
<td>2.54 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Intermittent release</td>
<td></td>
<td>STP</td>
<td>24.33 mg/l</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td>0.064 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information
Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection
If contact is likely, safety glasses with side shields are recommended.

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.

  Environmental manager must be informed of all major releases.

  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**

  **Respiratory protection**

  Wear suitable protective clothing.

  **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.

**SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

**Appearance**

- **Physical state**: Liquid.
- **Form**: Liquid.
- **Colour**: Dark brown

**Odour**

- **Odour threshold**: Not available.

**pH**

- **pH**: Not available.

**Melting point/freezing point**

- **Melting point/freezing point**: Not available.

**Initial boiling point and boiling range**

- **Initial boiling point and boiling range**: Not available.

**Flash point**

- **Flash point**: 220.0 °C (428.0 °F)

**Evaporation rate**

- **Evaporation rate**: Not available.

**Flammability (solid, gas)**

- **Flammability (solid, gas)**: Not available.

**Upper/lower flammability or explosive limits**

- **Flammability limit - lower (%)**: Not available.
- **Flammability limit - upper (%)**: Not available.

**Vapour pressure**

- **Vapour pressure**: Not available.

**Vapour density**

- **Vapour density**: Not available.

**Relative density**

- **Relative density**: Not available.

**Solubility(ies)**

- **Solubility (water)**: Insoluble
- **Solubility (other)**: Not available.

**Partition coefficient (n-octanol/water)**

- **Partition coefficient (n-octanol/water)**: Not available.

**Auto-ignition temperature**

- **Auto-ignition temperature**: Not available.

**Decomposition temperature**

- **Decomposition temperature**: Not available.

**Viscosity**

- **Viscosity**: Not available.

**Explosive properties**

- **Explosive properties**: Not available.
### Oxidising properties
Not available.

### 9.2. Other information
- **Density**: 0.91 g/cm³ @15°C
- **Kinematic viscosity**: 184 mm²/s
- **Kinematic viscosity temperature**: 40 °C (104 °F)
- **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
Hazardous polymerisation does not occur.

10.4. Conditions to avoid
Excessive heat.

10.5. Incompatible materials
Strong acids, alkalies and oxidizing agents.

10.6. Hazardous decomposition products
At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

### SECTION 11: Toxicological information

**General information**
Occupational exposure to the substance or mixture may cause adverse effects.

**Information on likely routes of exposure**
- **Inhalation**: 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**
Irritation of eyes. Exposed may experience eye tearing, redness, and discomfort. May cause an allergic skin reaction.

**11.1. Information on toxicological effects**

**Acute toxicity**
None known.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear Axle Oil SAE 90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td>&gt; 5000 mg/kg (calcd. ATE)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>propoxylated, esterified with diphosphorus pentaoxide, and salted by</td>
<td></td>
<td></td>
</tr>
<tr>
<td>amines, C12-14- tert-alkyl</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>2000 mg/kg (OECD 401)</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td></td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td><strong>Respiratory sensitisation</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td></td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - single exposure</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Aspiration hazard</strong></td>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Mixture versus substance information</strong></td>
<td></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td></td>
<td>Not available.</td>
</tr>
</tbody>
</table>
SECTION 12: Ecological information

12.1. Toxicity
Toxic to aquatic life with long lasting effects. Avoid discharge into drains, water courses or onto the ground.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>EC50</td>
<td>Pseudokirchnerella subcapitata</td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EL50</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Fish</td>
<td>LL50</td>
<td>Oncorhynchus mykiss</td>
</tr>
<tr>
<td>Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>EC50</td>
<td>Pseudokirchnerella subcapitata</td>
</tr>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EL50</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Pimephales promelas</td>
</tr>
</tbody>
</table>

No data is available on the degradability of this product.

12.2. Persistence and degradability

**Biodegradability**

**Percent degradation (Aerobic biodegradation)**

| Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs |
| 17.4 % (OECD 301B) |
| Test Duration: 28 days |
| Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl |
| 3.6 % (ASTM D-5864-95) |
| Test Duration: 28 days |

12.3. Bioaccumulative potential
No data available.

**Partition coefficient n-octanol/water (log Kow)**
Not available.

12.4. Mobility in soil
No data available.

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
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

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). Avoid discharge into water courses or onto the ground.

**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 02 05
15 01 10

**Disposal methods/information**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

**Special precautions**
Dispose in accordance with all applicable regulations.
SECTION 14: Transport information

IMDG Regulated Marine Pollutant.

General

ADR

14.1. UN number
UN3082

14.2. UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((Z)-octadec-9-enylamine; Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl)

14.3. Transport hazard class(es)
Class 9
Subsidiary risk -
Label(s) 9
Hazard No. (ADR) 90
Tunnel restriction code E

14.4. Packing group
III

14.5. Environmental hazards
Yes

14.6. Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Classification code
M6

IATA

14.1. UN number
UN3082

14.2. UN proper shipping name
Environmentally hazardous substance, liquid, n.o.s. ((Z)-octadec-9-enylamine; Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl)

14.3. Transport hazard class(es)
Class 9
Subsidiary risk -

14.4. Packing group
III

14.5. Environmental hazards
Yes
ERG Code 9L

14.6. Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed.
Cargo aircraft only Allowed.
Maximum net quantity packaging - Passenger and cargo aircraft 450 L
Maximum net quantity packaging cargo only 450 L
Maximum net quantity packaging - Limited quantity 30.00 kg

Special provisions
A97,A158

IMDG

14.1. UN number
UN3082

14.2. UN proper shipping name
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((Z)-octadec-9-enylamine; Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl), Marine pollutant

14.3. Transport hazard class(es)
Class 9
Subsidiary risk -

14.4. Packing group
III

14.5. Environmental hazards
Yes

EmS F-A, S-F

14.6. Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Special provisions
274,335
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
This Safety Data Sheet complies with the requirements of Regulation (EC) No 2015/830.

Other EU regulations
Not applicable.

- Directive 94/33/EC on the protection of young people at work, as amended
  (Z)-octadec-9-enylamine (CAS 112-90-3)

- Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended
  (Z)-octadec-9-enylamine (CAS 112-90-3)

VOC (EU):
0 %

- Directive 2012/18/EU on major accident hazards involving dangerous substances
  Category: E2

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

AC: Article category.
acc., acc.to: according, according to.
ACGIH: American Conference of Governmental Industrial Hygienists.
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 marchandises dangereuses par route).
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).
AICS: Australian Inventory of Chemical Substances.
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 Arbeitsstofftolenzweren).
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.
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, labeling and packaging of substances and mixtures.
CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction.
CNS: Central Nervous System.
Maximum allowable workplace concentration – instantaneous value (MAK-Mow: Maximale Arbeitsplatzkonzentration – Momentanwert, Austria).


MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration – DFG).


MTD: Maximum tolerated dose.

MW: 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).


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.


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.


SARA: Superfund Amendments and Reauthorization Act.

SCAT: Self-Accelerating Decomposition Temperature.

SCL: Specific concentration limit.

SEA: Socio Economic Analysis.

SCL: Sewage treatment plant.

SU: Sector of use.

SVHC: Substance of Very High Concern.

SWC: Single-walled carbon nanotubes.

TOD: 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.
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.
WoE: Weight of evidence.
WHO: World Health Organization.
wwt: wet weight.

References

Information on evaluation method leading to the classification of mixture

Full text of any H-statements not written out in full under Sections 2 to 15

H26 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure by skin contact.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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: Rear Axle Oil SAE 90
Ford Int. Ref. No.: 108289
Print Date: 12.08.2015

Involved Products:

<table>
<thead>
<tr>
<th>Finiscode</th>
<th>Part number</th>
<th>Container Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 781 300</td>
<td>2L5J M2C9102 AB</td>
<td>1 l</td>
</tr>
</tbody>
</table>