



TRANSMISSION OIL AWD-2

SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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

1.1. Product identifier

Trade name	Transmission Oil AWD-2
Product code	Ford Internal Ref.: 195029
SDS Number	5851
Product use	Professional use

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

Relevant identified uses	
Use of the substance/mixture	Lubricant
Uses advised against	No additional information available.

1.3. Details of the supplier of the safety data sheet

Supplier	Distributor
Ford-Werke GmbH Edsel-Ford-Str. 2-14 50769 Cologne Germany +49 221 90-33333 sdseu@ford.com	Ford Motor Company Ltd. Parts Distribution Centre Royal Oak Way South NN11 8NT Daventry, Northants United Kingdom +44 1327 305 198

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

2. SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Health hazards	Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Environmental hazards	Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word	Warning
Hazard statements	
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statements	

Prevention

P280 Wear eye protection, face protection.

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.

Disposal

P501 Dispose of contents and container to an approved waste disposal plant.

Supplemental hazard information

EUH208 Contains C14-18 alpha-olefin epoxide, reaction products with boric acid(N/A), triphenyl phosphite(101-02-0). May produce an allergic reaction

2.3. Other hazards**Other hazards not contributing to the classification**

The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

3. SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008	Notes
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7 265-157-1 649-467-00-8 01-2119484627-25-XXXX	70 - < 90	Carc. 1B, H350 Asp. Tox. 1, H304	(Note L)
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	4259-15-8 224-235-5 01-2119493635-27-XXXX	1 - < 2,50	Eye Dam. 1, H318 Aquatic Chronic 2, H411	(50 <C <= 100) Eye Dam. 1, H318
C14-18 alpha-olefin epoxide, reaction products with boric acid	N/A 939-580-3 01-2119976364-28-XXXX	0,1 - < 1	Skin Sens. 1B, H317	
triphenyl phosphite	101-02-0 202-908-4 015-105-00-7 01-2119511213-58-XXXX	0,1 - < 0,25	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	(C >= 5) Skin Irrit. 2, H315 (C >= 5) Eye Irrit. 2, H319

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

Full text of H-statements: see section 16

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

Remove person to fresh air and keep comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact	Wash skin with soap and water. Get medical attention if irritation develops and persists.
Eyes contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Rinse mouth. Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed	
Symptoms/effects after eye contact	Severe eye irritation. IF IN EYES: Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
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.
5. SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	Alcohol resistant foam. Water spray. Carbon dioxide.
Unsuitable extinguishing media	Do not use a water jet since it may cause the fire to spread.
5.2. Special hazards arising from the substance or mixture	
Hazardous combustion products	Toxic fumes may be released.
5.3. Advice for firefighters	
Precautionary measures fire	Move containers from fire area if it can be done without personal risk. Do not dispose of fire-fighting water in the environment.
Firefighting instructions	Cool containers / tanks with spray water if possible.
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
6. SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	
General measures	Clean up any spills as soon as possible, using an absorbent material to collect it. If spilled, may cause the floor to be slippery.
For non-emergency personnel	
Emergency procedures	Ventilate spillage area. Avoid contact with skin and eyes.
For emergency responders	
Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	
Methods for cleaning up	Take up liquid spill into absorbent material. Never return spills in original containers for re-use.
Other information	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections For disposal of residues refer to section 13 : Disposal considerations" ". For further information refer to section 8: "Exposure controls/personal protection".

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Store in original tightly closed container. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s) No additional information available.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contains no substances with occupational exposure limits.

DNEL: Derived no effect level

No data available.

Components	Type	Route	Value	Form
C14-18 alpha-olefin epoxide, reaction products with boric acid (N/A)	Worker	Dermal	16.7 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	5.88 mg/m ³	Long-term - systemic effects
	Consumer	Oral	0.83 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	1.45 mg/m ³	Long-term - systemic effects
		Dermal	8.3 mg/kg bodyweight/day	Long-term - systemic effects
triphenyl phosphite (101-02-0)	Worker	Dermal	11.7 µg/cm ²	Acute - local effects
		Dermal	0.3 mg/kg bodyweight/day	Long-term - systemic effects
		Dermal	11.7 µg/cm ²	Long-term - local effects
		Inhalation	1.06 mg/m ³	Long-term - systemic effects
	Consumer	Dermal	11.7 µg/cm ²	Acute - local effects
		Oral	75 µg/kg bw/day	Long-term - systemic effects
		Inhalation	0.53 mg/m ³	Long-term - systemic effects
		Dermal	150 µg/kg bw/day	Long-term - systemic effects
		Dermal	11.7 µg/cm ²	Long-term - local effects
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	Worker	Dermal	9.6 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	6.6 mg/m ³	Long-term - systemic effects
	Consumer	Oral	0.19 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	1.67 mg/m ³	Long-term - systemic effects
		Dermal	4.8 mg/kg bodyweight/day	Long-term - systemic effects

PNEC: Predicted no effect concentration

No data available.

Components	Type	Route	Value	Form
C14-18 alpha-olefin epoxide, reaction products with boric acid (N/A)	Not applicable.	Freshwater	0.2 mg/l	
		Freshwater	0.02 mg/l	Intermittent release
		sediment	8556 mg/kg dwt	Freshwater
		sediment	855.6 mg/kg dwt	Seawater

		Soil	1706.3 mg/kg dwt	
		Oral	33.3 kg/kg food	Secondary Poisoning
		STP	100 mg/l	
Zinc bis[O,O-bis(2-ethylhexyl)]bis(dithiophosphate) (4259-15-8)	Not applicable.	Freshwater	4 µg/L	
		Seawater	4.6 µg/L	
		sediment	0.322 mg/kg dwt	Freshwater
		sediment	0.032 mg/kg dwt	Seawater
		Soil	0.062 mg/kg dwt	
		Oral	8.33 mg/kg food	Secondary Poisoning
		STP	3.8 mg/l	

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, Eyewash bottle with clean water

Materials for protective clothing

Wear suitable protective clothing.

Individual protection measures, such as personal protective equipment (PPE)

Eye protection

Safety glasses with side shields. EN 166.

Skin protection

Hand protection

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.

Material	Permeation	Thickness (mm)	Comments
Nitrile rubber (NBR)	6 (> 480 minutes)	0,4 mm	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.
In case of splash contact: Nitrile rubber (NBR)	6 (> 480 minutes)	0,4 mm	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

Other protective 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. Do not eat, drink or smoke during use.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment

Thermal hazard protection

Wear appropriate thermal protective clothing, when necessary.

Environmental exposure controls

Avoid release to the environment.

Consumer exposure controls

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.

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid.
Colour	brown.
Odour	Characteristic.
Odour threshold	No data available.
pH	No data available.
Relative evaporation rate (butylacetate=1)	No data available.
Melting point	Not applicable.

Freezing point	No data available.
Boiling point	No data available.
Flash point	> 190 °C
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Flammability (solid, gas)	Not applicable.
Vapour pressure	No data available.
Relative vapour density at 20 °C	No data available.
Relative density	No data available.
Density	0.86 g/cm ³ (15°C) (DIN EN ISO 12185)
Solubility	No data available.
Log Pow	No data available.
Viscosity, kinematic	28.5 mm ² /s (40°C, DIN EN ISO 3104)
Viscosity, dynamic	No data available.
Explosive properties	No data available.
Oxidising properties	No data available.
Explosive limits	No data available.

9.2. Other information

VOC (EU)	0 %
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10. SECTION 10: Stability and reactivity

10.1. Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid	None under recommended storage and handling conditions (see section 7).
10.5. Incompatible materials	Strong oxidizers. Strong acids. Strong bases.
10.6. Hazardous decomposition products	Thermal decomposition generates : Carbon oxides (CO, CO ₂). Toxic gases may be formed.

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

12. SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Harmful to aquatic life with long lasting effects.

Chronic aquatic toxicity

Substance / Product	Trophic level	Species	Type	Value	Duration	Remarks
Zinc bis[O,O-bis(2-ethylhexyl)]	Fish		LC50	4,4 mg/l	96h	
bis(dithiophosphate) (4259-15-8)	crustacea	daphnia	NOEC	0,4 mg/l	21d	

12.2. Persistence and degradability

Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Biodegradation 5 % 28 days (OECD 301B methode)

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

Transmission Oil AWD-2

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

Results of PBT assessment The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.

12.6. Other adverse effects

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.

13. SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods 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) . Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations Disposal must be done according to official regulations. Do not allow this material to drain into sewers/water supplies.

European List of Waste (LoW) code

13 02 05* mineral-based non-chlorinated engine, gear and lubricating oils
15 01 10* packaging containing residues of or contaminated by dangerous substances

14. SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. Not applicable.

UN-No. (IMDG) Not applicable.

UN-No. (IATA) Not applicable.

UN-No. (ADN)	Not applicable.
UN-No. (RID)	Not applicable.
14.2. UN proper shipping name	
Proper Shipping Name	Not applicable.
Proper Shipping Name (IMDG)	Not applicable.
Proper Shipping Name (IATA)	Not applicable.
Proper Shipping Name (ADN)	Not applicable.
Proper Shipping Name (RID)	Not applicable.
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	Not applicable.
IMDG	
Transport hazard class(es) (IMDG)	Not applicable.
IATA	
Transport hazard class(es) (IATA)	Not applicable.
ADN	
Transport hazard class(es) (ADN)	Not applicable.
RID	
Transport hazard class(es) (RID)	Not applicable.
14.4. Packing group	
Packing group	Not applicable.
Packing group (IMDG)	Not applicable.
Packing group (IATA)	Not applicable.
Packing group (ADN)	Not applicable.
Packing group (RID)	Not applicable.
14.5. Environmental hazards	
Dangerous for the environment	No
Marine pollutant	No
Other information	No supplementary information available.
14.6. Special precautions for user	
Overland transport	
Not applicable.	
Transport by sea	
Not applicable.	
Air transport	
Not applicable.	
Inland waterway transport	
Not applicable.	
Rail transport	
Not applicable.	

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

Not applicable.

15. SECTION 15: Regulatory information

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006

Transmission Oil AWD-2 - Distillates (petroleum), hydrotreated heavy paraffinic - Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
Transmission Oil AWD-2 - Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
Distillates (petroleum), hydrotreated heavy paraffinic	28. Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as Carcinogen category 1A or 1B (Table 3.1) or Carcinogen category 1 or 2 (Table 3.2) and listed as follows: Carcinogen category 1A (Table 3.1)/Carcinogen category 1 (Table 3.2) listed in Appendix 1 Carcinogen category 1B (Table 3.1)/Carcinogen category 2 (Table 3.2) listed in Appendix 2

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC (EU)

0 %

Other information, restriction and prohibition regulations

Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. Directive 94/33/EC on the protection of young people at work, as amended is applicable. For details, refer to section 3 and 8. Directive 2012/18/EU (SEVESO III). Not applicable.

National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

16. SECTION 16: Other information

Indication of changes

Section 1 - Section 16.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE	Acute Toxicity Estimate.
BCF	Bioconcentration factor.
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.
DMEL	Derived Minimal Effect level.
DNEL	Derived-No Effect Level.
DPD	Dangerous Preparations Directive 1999/45/EC.
DSD	Dangerous Substances Directive 67/548/EEC.
EC50	Median effective concentration.
IARC	International Agency for Research on Cancer.
IATA	International Air Transport Association.
IMDG	International Maritime Dangerous Goods.

LC50	Median lethal concentration.
LD50	Median lethal dose.
LOAEL	Lowest Observed Adverse Effect Level.
NOAEC	No-Observed Adverse Effect Concentration.
NOAEL	No-Observed Adverse Effect Level.
NOEC	No-Observed Effect Concentration.
OECD	Organisation for Economic Co-operation and Development.
PBT	Persistent Bioaccumulative Toxic.
PNEC	Predicted No-Effect Concentration.
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail.
SDS	Safety Data Sheet.
STP	Sewage treatment plant.
TLM	Median Tolerance Limit.
SDS	Safety Data Sheet.
OEL	Occupational Exposure Limit.
RRN	REACH Registration no..
CAO	Cargo Aircraft Only.
vPvB	Very Persistent and Very Bioaccumulative.
PCA	Passenger and Cargo Aircraft.
CAO	Cargo Aircraft only.
PCA	PASSENGER AND CARGO AIRCRAFT.

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006..

Training advice

Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4.
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1.
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1.
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2.
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3.
Asp. Tox. 1	Aspiration hazard, Category 1.
Carc. 1B	Carcinogenicity, Category 1B.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2.
Skin Irrit. 2	Skin corrosion/irritation, Category 2.
Skin Sens. 1	Skin sensitisation, Category 1.
Skin Sens. 1B	Skin sensitisation, category 1B.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

H350	May cause cancer.
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.
EUH208	Contains . May produce an allergic reaction.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Eye Irrit. 2	H319	Calculation method
Aquatic Chronic 3	H412	Calculation method

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 AWD-2
Ford Int. Ref. No.: 195029

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Involved Products:

	Finiscode	Part number	Container Size:
1.	1 931 273	FU7J 8708687 AA	300 ml