

# At a Glance.

**Aral Lubricants for Passenger Cars, Motorcycles and Commercial Vehicles** 





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# Meet Aral - A World-Class Brand.

Aral has a proud company history spanning more than a hundred years. On 28 November 1898, a conglomerate of 13 mining companies founded the "Westdeutsche Benzolverkaufsvereinigung" (West German Benzol Sales Association), which has evolved over the years into today's Aral Aktiengesellschaft. Since 2002, Aral has been operating under the umbrella of the German BP AG.

Thanks to first-class service across all of its business divisions, Aral has many satisfied customers. Its lubricants are produced entirely in Germany, where they are only available from authorised workshops and more than 2,500 Aral petrol stations. The international lubes business is handled by exclusive distributors all over the world.

Aral fulfils the strict requirements of the ISO 9001 and 14001 quality norm, and has repeatedly been awarded the DNV certificate. This ISO certification reaffirms the exceptional quality of the products and services for which Aral and its independently certified subsidiaries are known.

#### Aral's Automotive Lubricants Business

Decades of experience in lubrication technology have generated one of the best and most extensive product lines in the world. Every time we develop a new product, our target is to achieve the utmost customer benefit. As a part of this philosophy, we also provide individual product lines which are tailored to specific demands. We distribute these product lines throughout our entire sales network.

Should you have any further questions, please feel free to contact us directly. Alternatively, speak to your local sales representative, who will be happy to help.



Alles super.

# Motor Oils for Passenger Cars.

High-performance motor oils from Aral lower fuel and oil consumption and protect against wear. Operating conditions and vehicle manufacturer requirements are becoming increasingly stringent. In many cases, special products have to be developed to comply with the standards of a single manufacturer. Our loyalty to specialised retailers is of utmost importance to our car dealerships, workshop partners and international resellers.

#### Aral SuperTronic SAE 0W-40

Fully synthetic high-performance motor oil for petrol and diesel passenger cars with or without a diesel particle filter.

- · Approved by many OEMs
- Aral Low SAPS-Technology for maximum lifespan of the diesel particle filter
- · Protects the engine during extended oil drain intervals
- Adds approx. 3% to fuel economy and decreases exhaust emissions

#### Specifications/Approvals:

ACEA A3, B3, B4, C3 • API SM/CF • MB sheet 229.31 and 229.51 • BMW Longlife-04 (only EU countries) • Porsche • VW spec. 502 00, 503 01 and 505 00

#### Aral SuperTronic LongLife III SAE 5W-30

High-performance motor oil especially for nearly all VW Group passenger cars\* (VW, Audi, SEAT, Škoda).

- · For passenger cars with petrol and diesel engines
- Fulfils highest wear protection
- Aral Low SAPS-Technology for maximum lifespan of the diesel particle filter
- For passenger cars with or without LongLife service
- · Benefits the environment through fuel economy and decreased emissions

\*Not applicable for some R5 and V10 TDI engines in the Phaeton, Touareg and T5 and some VW unit injector-equipped TDI engines without LongLife service and without a diesel particle filter. Please check manufacturer's instruction!

Specifications/Approvals: VW spec. 504 00 and 507 00

#### Aral SuperTronic G SAE 0W-30

Fully synthetic high-performance motor oil for Mercedes-Benz, BMW and  $\mbox{GM/Opel}$  passenger cars.

- For passenger cars with petrol and diesel engines
- · Superior wear protection
- Fuel economy motor oil for attaining longer oil drain intervals with flexible maintenance periods
- · Reduces fuel and oil consumption

#### Specifications/Approvals:

ACEA A3, B3, B4 • API SL/CF • MB sheet 229.3 and 229.5 • BMW Longlife-01 • Opel GM LL-A-025, Opel GM-LL-B-025 • VW specs. 502 00, 503 01 and 505 00

#### Aral SuperTronic E SAE 0W-30

High-performance motor oil based on Aral Synth-Technology.

- For passenger cars with petrol and diesel engines, that require ACEA A5 or B5 motor oils, e.g. Volvo, Honda and Renault
- · For long drain intervals for certain Volvo models
- Only use in these specific engines due to HTHS of 3.0

#### Specifications/Approvals:

ACEA A5, B5 • API SL; ILSAC GF2

#### Aral HighTronic SAE 5W-40

High-performance motor oil based on Aral Synth-Technology.

- For passenger cars with petrol and diesel engines
- · Large reserves in engines for longer oil drain intervals and less refills
- Benefits the environment through fuel economy and decreased emissions

#### Specifications/Approvals:

ACEA A3, B3, B4 • API SL/CF • VW spec. 502 00 and 505 00 • MB sheet 229.3 • Porsche • BMW Longlife-98 • Opel GM-LL-B-025

#### Aral Tronic 431 SAE 5W-40

High-performance motor oil based on Aral Synth-Technology for unit injector-equipped diesel engines.

- Mandatory for various VW models with unit injector- equipped diesel engines (model year 1999 up to 2001) without LongLife service
- Usage also in some Ford passenger cars (e.g. Ford Galaxy TDI)

#### Specifications/Approvals:

ACEA A3, B3, B4 • API SL/CF • VW spec. 505 01 • Ford WSS-M2C917-A

#### Aral HighTronic C SAE 5W-30

High-performance motor oil based on Aral Synth-Technology.

- Specially developed for cars with a diesel particle filter which require an ACEA C1 motor oil
- With Aral Low SAPS-Technology for maximum lifespan of the diesel particle filter

Specifications/Approvals:

ACEA A1, B1, C1; A5, B5

#### Aral HighTronic F SAE 5W-30

High-performance motor oil based on Aral Synth-Technology specially developed for Ford, Chrysler and Land Rover passenger cars.

• For passenger cars with petrol and diesel engines

#### Specifications/Approvals:

ACEA A1, B1 • API SL/CF • Ford WSS-M2C 913B (... 913A, ... 912-A1)

#### Aral BlueTronic SAE 10W-40

Fuel economy motor oil with Aral Synth-Technology.

• For passenger cars with petrol and diesel engines

#### Specifications/Approvals:

ACEA A3, B3 • API SL/CF • VW spec. 505 00 • MB sheet 229.1

## Aral Elastic Range – Table.

Aral Product	Viscosity	ACEA	API/ILSAC	VW	МВ
SuperElastic	10W-40	A2, B2	SJ, CF	505 00	229.1
SuperElastic Diesel	10W-40	B2	CF	505 00	229.1
MultiElastic	15W-40	A2, B2	SJ, CF		229.1
MultiElastic Diesel	15W-40	B2	CF		229.1
MultiElastic	20W-50	A2, B2	SJ, CF	505 00	229.1
BasicElastic	15W-50		SJ, CF		
BasicElastic	15W-40		SH, CD		
BasicElastic	20W-50		SH, CD		



# **Lubricants for Motorcycles.**

## **Aral 4-Stroke Products**

Aral Product		Specifications
SuperEnergy 4T SAE 10W-50	Fully synthetic high-performance motor oil for 4-stroke motorcycle engines. It offers a superb stable lubricating film at very high temperatures and engine speeds, even at the end of the oil drain interval. It far exceeds the stringent requirements of all motorcycle manufacturers.	API SG JASO MA
HighEnergy 4T SAE 10W-40	Aral Synth-Technology enables excellent technical characteristics, for example high temperature resistance and anti-wear protection. It reliably prevents piston and valve deposits as well as slipping or sticking clutches after a coldstart.	API SG JASO MA
BasicEnergy 4T SAE 20W-50	Standard mineral-based motor oil with high lubrication safety, strong anti-wear properties and excellent protection against deposits and engine sludge. It offers optimal lubrication of transmissions lubricated by motor oil circulation.	API SG JASO MA

## **Aral 2-Stroke Products**

Aral Product		Specifications
SuperEnergy 2T	Fully synthetic biodegradable high-performance motor oil with superior performance. Developed for all separate and mixed lubrication systems with mixture ratios of up to 1:100.	ISO - L - EGD JASO FC
HighEnergy 2T	Fully synthetic superior high-performance motor oil with excellent lubrication safety. Suitable for all separate and mixture lubrication systems for mixture ratios of up to 1:100 in motorcycles, farming and construction equipment.	ISO - L - EGD JASO FC
BasicEnergy 2T	Mineral oil-based motor oil with synthetic components. It is self-mixing for mixture ratios of up to 1:50. Very good lubrication safety and strong protection against deposits.	ISO - L - EGD JASO FC

# Motor Oils for Commercial Vehicles.

#### Aral SuperTurboral SAE 5W-30

Top-of-the-line USHPD low-friction formula motor oil with Aral Synth-Technology for the latest generation of commercial vehicle diesel engines. Decreased low- temperature viscosity for optimal cold-start characteristics, reduced high-temperature viscosity for fuel savings at operating temperature while guaranteeing highest lubrication film stability.

- Fuel savings of 4% on average compared to 15W-40-viscosity oil (proven in numerous fleet tests)
- For extended oil change intervals of up to 150,000 km (please comply with the manufacturer's requirements!)
- Optimal cold-start characteristics
- · Excellent results in reducing deposits in the turbocharger and intercooler
- Strong protection against wear for long engine life
- Optimal performance reserves even with high-sulphur diesel fuels (e.g. in countries with low-quality fuel)

#### Not for use in petrol engines!

Specifications/Approvals:

ACEA E4, E5 • MB sheet 228.5 • MAN M 3277 • MTU (oil type 3) • Cummins CES 20072/77 • Mack EO-M Plus

#### Aral GigaTurboral SAE 10W-40

Aral GigaTurboral SAE 10W-40 is a high-performance motor oil using Aral Synth-Technology. The new and innovative additive concept permits its usage in heavy-duty diesel engines of today and tomorrow (trucks, buses, construction machinery, agricultural machinery). The product meets and outperforms the standards of tomorrow and the requirements for exhaust gas reduction (Euro III, Euro IV).

- Exceptional properties for top engine cleanliness
- High oxidation stability for long oil drain intervals
- · Pioneering new soot-binding capability
- Allows longest oil drain intervals of up to 150,000 km (please comply with the manufacturer's requirements!) and gives additional reserves even when the maximum allowed oil drain intervals are reached
- Optimal performance reserves even when using diesel fuels with high sulphur ratios (e.g. in countries with low fuel quality)

#### Not for use in petrol engines!

Specifications/Approvals:

ACEA E5, E7 • API CF • MB sheet 228.5 • MAN M 3277/CRT • Volvo VDS 2 • RVI RXD

#### Aral MegaTurboral SAE 10W-40

Top-class USHPD low-friction formula motor oil with Aral Synth-Technology for the latest generation of commercial vehicle diesel engines. Suitable for extended oil change intervals. Meets the current requirements of commercial vehicle manufacturers and the most stringent European test requirements.

- Minimal engine wear due to excellent lubricating film even under extreme thermal and mechanical stress
- Very good cold-start characteristics through decreased low-temperature viscosity
- Large performance reserves even with high-sulphur diesel fuels (e.g. in countries with low fuel quality)
- For extended oil change intervals of up to 120,000 km (please comply with the manufacturer's requirements!)
- Significant fuel savings during the entire period between oil changes compared with a motor oil with a 15W-40 viscosity range

#### Not for use in petrol engines!

Specifications/Approvals:

ACEA E3, E4 • API CF • MB sheet 228.5 • MAN M 3277/CRT • Volvo VDS-2

#### Aral MegaTurboral LA SAE 10W-40

Aral MegaTurboral LA SAE 10W-40 is a high-performance diesel motor oil based on Aral Synth-Technology for use in commercial vehicles. This product was specially developed in view of the legally stipulated Euro IV standard toensure low-emission motor oils. This product stands out due to a particularly low content of sulphate ash, phosphorus and sulphur (low-SAPS oils). This excellent minimal-emissions diesel motor oil was specially conceptualised for the Euro IV engine of MAN and Mercedes-Benz.

- Protects aggregates and prolongs their service life
- Prolonged oil change intervals possible
- Keeps the engine clean due to the latest additive technology and prevents engine from wear
- Offers an optimal degree of effectiveness for exhaust after-treatment systems

#### Not for use in petrol engines!

Specifications/Approvals:

ACEA E4, E6 • API CF • MB sheet 228.51 and 228.5 • MAN M 3477/M 3277/CRT



#### Aral ExtraTurboral SAE 10W-40

Low-friction motor oil with Aral Synth-Technology for mixed fleets with petrol and diesel engines. Contains excellent additives for outstanding fuel savings

- · Reduces logistical costs through simplified inventory
- Good cold-start characteristics and quick supply of oil to all parts of the engine
- Effective protection against oil sludge
- Meets demanding requirements for diesel engines (especially car engines) with absolute reliability

#### Specifications/Approvals:

ACEA E3, E5, B3, B4, A3 • API CH-4/SJ • MB sheet 228.3 and 229.1 • MAN M 3275 • Volvo VDS-2 • Renault RLD • DAF HP-1/HP-2 • MTU (oil type 2)

#### Aral PlusTurboral SAE 15W-40

Mineral oil-based SHPD motor oil with excellent capabilities and a combination of additives specially designed for use in commercial vehicles.

#### Not for use in petrol engines!

Specifications/Approvals:

ACEA E3, E7 • API CI-4/SJ • MB sheet 228.3 • MAN M 3275 • Volvo VDS-2 • Mack EO-M Plus • Renault RLD • Caterpillar ECF-1

#### Aral MultiTurboral SAE 15W-40/20W-50

Universal mineral oil-based petrol and diesel motor oil with a wide performance range for mixed fleets.

- Keeps engines extremely clean even under the most difficult operating conditions
- Ensures large performance reserves during long oil drain intervals

#### Aral MultiTurboral SAE 15W-40

Specifications/Approvals:

ACEA E2, B2, A2 • API CG-4/SH • MB sheet 228.1 and 229.1 • MAN 271 • Volvo VDS

#### Aral MultiTurboral SAE 20W-50

Specifications/Approvals:

ACEA E2, B2 • API CF-4/SG • MB sheet 229.1 • MAN 271

#### Aral BasicTurboral SAE 10W/20W-20/30/40/50

Mineral oil-based single-grade motor oils with powerful additives, also suitable for use as a hydraulic fluid in hydraulic clutches, retarders and transmissions (please comply with the manufacturer's requirements!).

#### Specifications/Approvals:

ACEA E2 • API CF/SF • MB sheet 228.0 (not for BasicTurboral 50) • MAN 270 (not for BasicTurboral 50)

## **Gear Oils**

#### Additional Operating Fluids for Passenger Cars.

When developing a lubricant, it is important to consider its interaction with other products and materials at all times. Aral continuously develops its products to ensure they always remain at the cutting edge of lubrication technology. High-performance motor oil can only perform effectively in conjunction with other modern high-performance products such as the most advanced gear oil.

#### Gear Oils, Greases and Other Operating Fluids.

We offer gear oils, transmission fluids, hydraulic fluids, greases, coolants and brake fluids for commercial vehicles and construction machines. Developing all these new products requires vast know-how. Aral's participation in international committees for the lubricant industry, the company's close cooperation with the automotive industry, its accredited R&D division and the entire group's ISO quality certification are all factors which ensure that Aral products consistently comply with the highest international standards. At the end of our lengthy development process, extensive bench testing and vehicle fleet tests under everyday conditions are conducted to evaluate the performance of new products. Our perfectly integrated product range for commercial vehicles means that you'll find transmission fluids and greases that reinforce the fuel-saving properties of our motor oils.

### Gear Oils for Passenger Cars

#### Aral Getriebeöl EP SYNTH. SAE 75W-90

High-performance gear oil with Aral Synth-Technology with the low-friction and multigrade characteristics of an SAE 75W-90. Used mainly in 4 and 5-speed manual car transmissions. Reduces shifting problems and helps to save fuel.

Specifications/Approvals:

API GL 4 + • VW spec. 501 50 (G50) • MIL-L-2105

#### Aral Getriebeöl EP Plus SAE 80W-90

High-performance gear oil with the latest additive technology for universal use in commercial vehicles in highly stressed hypoid axles, synchronised transmissions, auxiliary drives, steering systems, transfer cases, etc.

Specifications/Approvals:

API GL 4, GL 5 and MT1 • MAN 3343 Type ML • ZF TE-ML 02B, 05A, 07A, 12E, 16B, 17B, 19B • MIL-L-2105D

#### Aral Getriebeöle EP SAE 80W/85W-90/85W-140

Highly efficient gear oil that meets international standards of moderate hypoid transmission fluids for manual transmissions, axle drives and steering systems in cars. Strong protection against wear and corrosion.

#### **EP SAE 80W**

Specifications/Approvals:

API GL 4 • MB sheet 235.1 • ZF TE-ML 02A, 17A • MAN 341 Type N

#### **EP SAE 85W-90**

Specifications/Approvals:

API GL 4 • ZF TE-ML 02A, 16A, 17A • MAN 341 Type N

#### **EP SAE 85W-140**

Specifications/Approvals:

API GL 4

#### Aral Getriebeöl HYP SYNTH. SAE 75W-90

High-performance gear oil with Aral Synth-Technology with the low-friction formula and multigrade characteristics of an SAE 75W-90 for highly stressed (hypoid) live axles and – if approved by the car manufacturer – suitable for highly stressed transmissions (manual transmissions/axle drives). Reduces axle problems and helps to save fuel.

Specifications/Approvals:

API GL 5

#### Aral Getriebeöle HYP SAE 80W/85W-90/85W-140

Mineral oil-based hypoid gear oil that meets international standards for very highly stressed axle drives and steering systems. Also for differential locks and unsynchronised manual transmissions, if permitted by manufacturer.

#### **HYP SAE 80W**

Specifications/Approvals:

API GL 5 • ZF TE-ML 05A, 07A, 16B, 17B • MAN 342 Type N

#### **HYP SAE 85W-90**

Specifications/Approvals:

API GL 5 • MB sheet 235.0 • ZF TE-ML 05A, 07A, 16C, 17B, 19B • MAN 342 Type N

#### HYP SAE 85W-140

Specifications/Approvals:

API GL 5 • ZF TE-ML 05A, 07A, 16D, 19B

#### Aral Getriebeöl HYP LS SAE 85W-90

Hypoid gear oil with limited slip (LS) additive for use in locked axle systems, transfer cases, differentials with axle drives, and car and truck transmissions.

Specifications/Approvals:

API GL 5 + LS • ZF TE-ML 05C, 12C, 16E



#### Aral Getriebeöl BS SAE 75W-90

Fully synthetic hypoid gear oil for rear axles in passenger cars and commercial vehicles.

#### Specifications/Approvals:

API GL 5 • Scania STO 1:0 • MAN 342 Type SL • BMW (oil type OSP)

#### Aral Getriebeöl BS-LSX SAE 75W-140

Fully synthetic gear oil with LS additive for extended-interval use in cars with locked axle systems, in axles, manual transmissions and auxiliaries in commercial vehicles.

#### Specifications/Approvals:

API GL 5 + LS • BMW (oil type MSP/A)

#### Aral Getriebeöl ATF E-S

#### Transmission Fluid

Fully synthetic ATF with GM specification ATF Type II E for extended oil change intervals in Mercedes-Benz and ZF automatic transmissions.

#### Specifications/Approvals:

GM ATF Type II E • Ford Mercon • Allison C-4 • Caterpillar TO-2 • MB sheet 236.8 • MAN 339 Type D • Renk • ZF TE-ML 09X, 14B, 16L • Voith 55.6336.xx (G 1363)

#### Aral Getriebeöl SGF 84

#### Transmission Fluid

ATF in accordance with GM Type A, Suffix A and other uses in accordance with manufacturers' requirements.

#### Specifications/Approvals:

MB sheet 236.2 • MAN 339 Type A • Allison C-4 • Caterpillar TO-2

## **Gear Oils**

## Gear Oils for Passenger Cars

#### Aral Getriebeöl ATF 22

Transmission Fluid

Transmission fluid for automatic transmissions with GM ATF Type II D specification for use in automatic/manual transmissions, clutch and steering systems.

#### Specifications/Approvals:

GM ATF Type II D • MB sheet 236.6 • ZF TE-ML 03D, 04D, 11A, 14A, 17C • MAN 339 Type D • Allison C-4 • Caterpillar TO-2 • Voith 55.6335.xx (G 607)

#### **Aral Getriebeöl ATF 55**

Transmission Fluid

Automatic gear oil (for automatic transmissions in accordance with GM specification Dexron® III).

For use in automatic/manual transmissions, clutches and steering systems.

Specifications/Approvals:

GM ATF Dexron III • MB sheet 236.5 • MAN 339 Type F • ZF TE-ML 04D, 14A, 17C • Voith 55.6335 • Allison C-4 • Ford Mercon 051103

#### Aral Getriebeöl ATF M 12

Transmission Fluid

Automatic transmission fluid for passenger cars (NAG 2/ NAG 1) according to Mercedes-Benz sheet 236.12 and the General Motors specification Dexron  $^{\ast}$  III.

Specifications/Approvals:

GM ATF Type III • MB sheet 236.12

### Gear Oils for Commercial Vehicles

#### Aral Getriebeöl SNS SAE 75W-80

High-pressure gear oil with Aral Synth-Technology for use in manual transmissions with re-/intarder, and in mechanical and supplementary transmissions. For use in commercial vehicles. Also approved for longer oil change intervals in accordance with manufacturers' requirements.

Specifications/Approvals:

API GL 4 • MAN 341 Type TL • ZF TE-ML 02D

#### Aral Getriebeöl SNS-B SAE 75W-80

Fully synthetic high-performance oil for use in transmissions – also with re-/intarder – axle drives, auxiliary drives and steering systems in commercial vehicles. For oil change intervals of up to 400,000 km as prescribed by manufacturers.

Specifications/Approvals:

API GL 4 • MAN 341 Type SL

#### Aral Getriebeöl SNA-B SAE 80W-140

High-performance gear oil with Aral Synth-Technology for use especially in commercial vehicle rear axle drives and transmissions, e.g. DAF, Scania, Volvo and Renault. Designed for extended oil change intervals of up to 400,000 km.

Specifications/Approvals:

API GL 5 • Scania STO 1:0 • DAF • Renault • Iveco • Volvo

#### Aral Getriebeöl SNA-C SAE 75W-90

Fully synthetic high-performance gear oil with low-friction properties for use in axle drives, transmissions, steering systems, final and auxiliary drives of commercial vehicles for oil change intervals of up to 400,000 km as prescribed by manufacturers. Meets the toughest current standards of commercial vehicle manufacturers.

Specifications/Approvals:

API GL 5 • Scania STO 1:0 • ZF TE-ML 07A, 12B, 16F, 17B • MAN 342 Type SL • MB sheet 235.8

#### Aral Getriebeöl SNA-D SAE 80W-90

Multigrade axle oil for highly stressed transmissions and axles of several different types. Exclusively developed for Mercedes-Benz HL-6 axles. Can also be used for all other types of axles on trucks, passenger cars, farm equipment, vans and buses. Also for certain manual gearboxes if API GL-5 performance level is recommended by the manufacturer.

Specifications/Approvals:

API GL5 • SAE J 2360 • MB sheet 235.20 • MAN 342 ML • ZF TE-ML 07A, 08 • Scania STO 1:0

#### Aral Fluid HGS SAE 80W

Universal fluid type UTTO (formerly TOU) for use in transmissions, front and rear axles, hydraulic systems, engine accessories, and 'wet' brakes in construction and farming equipment (tractors and implements).

Specifications/Approvals:

API GL 4 • Caterpillar TO-2 • ZF TE-ML 05F • MF 1135, 1141, 1143 • Volvo WB 101 • John Deere J20C • Case MS 1207

## **Greases**

#### **Aral Mehrzweckfett**

Multi-purpose grease

Lithium-saponified universal grease with a premium mineral oil base containing selected components.

- Protective agents guard against wear, ageing and corrosion
- Universal lubricant/lubricant grease for a wide variety of uses, including in cars with the approval of the automobile industry

Specifications/Approvals:

K 2K-30 • MB sheet 267

#### Aral Mehrzweckfett F

Multi-purpose grease

Lithium-saponified universal grease with EP and  $\ensuremath{\mathsf{MoS}}_2$  additives as solid lubricant.

- · Excellent dry-running characteristics
- Roll stability and good protection against ageing and corrosion
- Significant protection against wear; high pressure resistance

Specifications/Approvals:

KPF 2K-30 • Ford • Caterpillar

#### **Aral Langzeitfett H**

Long-life grease

Lithium-saponified, high-quality EP long-life grease with selected mineral oil bases.

- Especially strong tendency to draw beads, highly adhe sive, approved by the automobile industry
- Exceptionally well suited to use in central lubrication systems
- Highly effective additives protect against corrosion and ageing

Specifications/Approvals:

KP 2K-20 • MB sheet 267 • MAN 283 Li-P2/1

#### **Aral Radlagerfett**

Wheel bearing grease

Aral Radlagerfett is a lithium-saponified universal complex grease for all types of wheel bearings and other lubricating points.

Specifications/Approvals:

KP 2 N-30 • MB sheet 265.1 • MAN 284 Li-H2

#### Aral Fließfett N

Viscose grease

Lithium-saponified viscose grease with mineral oil/PAO base for central lubricating systems in commercial vehicles (e.g. Mercedes-Benz/MAN vehicles).

Specifications/Approvals:

GP 00 K-40 • MB sheet 264 • MAN 283 Li-P 00/000 • Vogel • Lincoln

#### Aral Fließfett BAB 000

Viscose grease

Mixed-saponified lubricant grease with a synthetic ester base. Predominantly biodegradable viscose grease, suitable for central lubrication systems in commercial vehicles. Also suited to use in non-oiltight transmissions as transmission viscose grease, even for the duration of the vehicle's service life.

Specifications/Approvals:

GPE 00/000 G-40 • MAN 283 Li-P 00/000 • Vogel • Lincoln

# **Additional Operating Fluids**

#### **Coolants**

#### Aral Antifreeze Silikatfrei

Silicate-Free coolant

Radiator coolant for summer and winter operation. Suitable for nearly all cooling/engine systems to prevent corrosion and cavitation. Meets passenger car and commercial vehicle manufacturers' requirements.

#### Specifications/Approvals:

VW, Audi, Seat, Škoda (VW TL 774D = G12+) • MB sheet 325.3 • Ford WSS-M97B44-D • MAN 324 Type SNF • Renault (Type D) • DAF • Scania • Opel • ASTM D 4985, ASTM D 3306

#### **Aral Antifreeze Extra**

Coolant

Radiator coolant for summer and winter operation. Suitable for nearly all cooling/engine systems to prevent corrosion and cavitation. Meets passenger car and commercial vehicle manufacturers' requirements.

Specifications/Approvals:

VW, Audi, Seat, Škoda (VW TL 774C = G11) • MB sheet 325.0 • MAN 324 Type NF • BS 6580 • BMW • Liebherr • Opel • Porsche • Saab • MTU • Rover • Scania • Volvo • Deutz • BWB • ASTM D 4985-89, ASTM D 3306

## **Brake Fluids**

#### Aral Bremsflüssigkeit XHS DOT 5.1

Aral Bremsflüssigkeit XHS DOT 5.1 can be used in hydraulically operated brake and clutch systems in passenger cars and commercial vehicles according to the specifications of the manufacturer. Aral Bremsflüssigkeit XHS DOT 5.1 fulfils the current requirements/safety regulations of the SAE and FMVSS (DOT) institutions, and the additional special requirements of leading vehicle manufacturers.

Specifications/Approvals:

SAE J 1703 • FMVSS 116 • DOT 5.1 ( DOT 4) • ISO 4925

#### Aral Bremsflüssigkeit HS DOT 4

Aral Bremsflüssigkeit HS DOT 4 is used in hydraulically operated brake and clutch systems in passenger cars, commercial vehicles of all types and motorcycles. Aral Bremsflüssigkeit HS DOT 4 has a very low tendency to vapour lock due to a high thermal stability, and has a neutral behaviour towards seal/hose materials. This product meets all major automobile manufacturers' international requirements.

Specifications/Approvals:

ISO 4925 • SAE S 1704 • FMVSS 116 • DOT 4

#### Aral Bremsflüssigkeit HS DOT 4 Super

Brake fluid for hydraulic brake and clutch systems in passenger cars, commercial vehicles of all kinds and motorcycles. Compared to DOT 4, this product has a higher wetboiling point (over 180 °C) and offers greater safety in regard to reducing the danger of vapour lock, which occurs through moisture absorption. Fulfils and exceeds the requirements of DOT 4. This level of performance also corresponds to the requirements of most motor vehicle manufacturers of repute.

Specifications/Approvals:

SAE J 1703 • FMVSS 116 • DOT 4 (DOT 4+, DOT 4 Super) • ISO 4925

# **Additional Operating Fluids**

### Screen Cleaner

#### Aral ScreenCleaner W

Windscreenwasher concentrate for winter use. Protects against freezing to -60  $^{\circ}\text{C}.$ 

- · Removes tough dirt thoroughly
- Cleans windscreens and headlights without leaving streaks, and prevents windscreenwas her fluid and headlightwasher fluid from freezing
- Add more Aral ScreenCleaner W to the water as the temperature drops

#### Aral ScreenCleaner S

Windscreenwasher concentrate to be mixed with water for car windscreens and headlamp washers.

- Removes tough dirt such as insects, dust and greasy diesel exhausts
- · Cleans windshield and headlamps thoroughly and without streaks
- · Safe on polycarbonate panes of headlights, indicators and tail lights

#### **Additional Products**

#### Aral Kipper-Hydrauliköl

Dumper truck hydraulic fluid

Hydraulic fluid designed specifically for use in commercial vehicles. Uses: hydraulic systems, cab-tilting systems, etc.

- · Good water separation ability
- Strong protection against wear
- · Tough protection against corrosion
- Ageing stability

Specifications/Approvals:

MB sheet 341 • DIN 51524T2 Type HLP • ISO VG 15

#### Aral LHM +

Hvdraulic fluid

Aral LHM + is a mineral oil-based hydraulic fluid for use in Citroën vehicles of the PSA Group. Aral LHM + must be used for hydraulics, steering and brake systems in the central unit. Usable in all Citroën hydraulic systems which have a green colour.

Specifications/Approvals: PSA B 712710

#### **Puriklyn TR**

Cleaning agent with solvents

- For use in cleaning systems for parts and spray/brush/immersion systems for cold engines/machines
- CFC-free and free from other halogen organic substances
- Separator-friendly
- Dissolves and removes oils, greases, bitumen, tar and waxes

#### Specifications/Certifications:

Meets the requirements for fast-acting (cold cleaning) products in accordance with TL 6850-0017-4 for the German Federal Procurement Office; tested by the Institute for Commercial Water Supply and Prevention of Air Pollution, Cologne.

#### **Aral Vitamol ZH-M**

Hydraulic fluid

Aral Vitamol ZH-M was developed specially for the motor vehicle industry, particularly Mercedes-Benz, for use as a central hydraulic fluid. Favourable viscosity index, low evaporation loss, active substance combination to minimise the noise level and special corrosion reduction inhibitors.

#### Ölbindemittel MOP Turbo

Oil binder

Environmentally friendly non-flammable mineral granulate.

- · High absorbing power
- Removes fuels and lubricants as well as liquid chemicals from hard surfaces
- Neutralises weak acids, lyes and solvents within limits
- · Free from asbestos and similar fibre materials

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