



7.3 Fluids and lubricants

Application	Fluid/lubricant	Specification	Season/temperature	Capacities ¹
Engine ²	Diesel fuel	ASTM D975 grade 2D S15 (USA) ³	Summer or winter diesel depending on outside temperatures	80 liters (21.13 gal)
		EN 590 (EU) ³		
	Coolant	Distilled water and anti-freeze ASTM D3306, ASTM D4985, Deutz DQC CA-14	Year-round	12 liters (3.17 gal)
Engine	Engine oil	API CJ-4	-15°C to +40°C (5°F to 104°F)	8.9 liters (2.35 gal)
		ACEA E9		
		ECF-3		
Hydraulic oil reservoir	Hydraulic oil	Eurolub HVLP 46 ⁴	Year-round ⁵	60 liters (15.9 gal)
	Biodegradable hydraulic oil ⁶	Panolin HLP Synth 46 Fina Biohydran SE 4& BP Biohyd SE - S 46 Fuchs Plantosyn 3268		
Brake fluid	Hydraulic oil	Eurolub HVLP 46 ⁴	Year-round ⁵	200 ml (12.2 in ³)
	Biodegradable hydraulic oil ⁶	Panolin HLP Synth 46		
Grease nipples	Grease	KPF 2 K-20 ⁷ ISO-L-X-BCEB 2 ⁸	Year-round	According to the maintenance plan
Battery terminals	Acid-proof grease ⁹	FINA Marson L2	Year-round	As required
Washer system	Cleaning agent	Glass cleaner and anti-freeze	Year-round	1.2 l (73 in ³)

1. The capacities indicated are approximate values; the oil level check alone is relevant for the correct oil level.
Capacities indicated are no system fills
2. Using biodegradable diesel fuel is prohibited
3. Sulfur content up to 15 ppm (0.0015%)
4. According to DIN 51524 section 3, ISO-VG 46
5. Depending on local conditions – see *"Engine oil types" on page 7-9*
6. Biodegradable hydraulic oil based on saturated synthetic esters with an iodine value of < 10, according to DIN 51524, section 3, HVLP, HEES
7. According to DIN 51502, lithium-saponified grease
8. According to DIN ISO 6743-9, lithium-saponified grease
9. Standard acid-proof grease NGLI category 2

Engine oil types

Tier IV engine				
Viscosity grade	Ambient temperature			
	min. °C	min. °F	max. °C	max. °F
SAE 0W30	-35	-31	30	86
SAE 0W40	-35	-31	40	104
SAE 5W30	-30	-22	30	86
SAE 5W40	-30	-22	40	104
SAE 10W30	-15	5	30	86
SAE 10W40	-15	5	40	104
SAE 15W40	-15	5	40	104
SAE 20W50	-5	23	>40	>104

Hydraulic oil types

Hydraulic oil types				
Viscosity grade	Ambient temperature			
	min. °C	min. °F	max. °C	max. °F
HVLP 46¹				
ISO VG32	-20	-4	30	86
ISO VG46	-5	23	40	104
ISO VG68	5	41	50	122

1. According to DIN 51524 section 3, ISO-VG 46.



Important information regarding operation with biodegradable hydraulic oil

- Use only the biodegradable oils that have been tested and released by Wacker Neuson.
- Add only biodegradable oil of the same type. In order to avoid misunderstandings, attach a label on the hydraulic oil filler inlet providing clear information regarding the type of oil currently used.
The joint use of two different biodegradable oils can affect the quality of one of the oil types. Therefore ensure that the remaining amount of biodegradable oil complies with the national and regional regulations as you replace it. Observe the manufacturer's indications.
- Do not add mineral oil – the content of mineral oil should not exceed 2% of the system fill in order to avoid foaming problems and to ensure biological degradability.
- When running the vehicle with biodegradable oil, the same oil and filter replacement intervals are valid as for mineral oil.
- Always have the condensation water in the hydraulic oil reservoir drained by a Wacker Neuson service center before the cold season. The water content may not exceed 0.1% by weight.
- The instructions in this Operator's Manual concerning environmental protection are also valid for the use of biodegradable oil.
- Subsequent change from mineral oil to biodegradable oil may only be performed by a Wacker Neuson service center.