



Brembo S.p.A.

Headquarters and offices:

Viale Brembo, 25 – 24036 CURNO (BG)

Viale Europa, 2 – 24040 STEZZANO (BG)

tel. 035 605 1111 – Fax: 035 605 2300

BRAKE FLUID DOT 4 LOW VISCOSITY

PRODUCT SPECIFICATION

BRAKE FLUID DOT 4 LOW VISCOSITY meets the requirements of SAE J1704 Low Viscosity, FMVSS 116 DOT 4 and ISO 4925 Class 6.

BRAKE FLUID DOT 4 LOW VISCOSITY has a higher boiling point than standard DOT 4, allowing for longer service intervals and, thanks to its low viscosity at low temperature, is recommended for vehicles with modern electronic brake and stability systems (ABS, EPS), since it allows for fast response of the braking system, especially at low temperatures.

BRAKE FLUID DOT 4 LV offers excellent corrosion protection of braking system and all metal alloys and compatibility with rubber components to enable long durability of the vehicle braking system.

Suitable for all hydraulic brake systems based on glycol ethers and polyglycol technology.

It can be mixed together with DOT 3, DOT 4 and DOT 4 low viscosity grades, but not with products based on mineral and silicone oils.

<i>PROPERTY</i>	<i>UNITS</i>	<i>REQUIREMENT</i>	<i>SPECIF.</i>	<i>METHOD</i>
Appearance	-	-	Liquid homogenous	Visual
Colour	-	Colourless to amber	Colourless to amber	Visual
Equilibrium Reflux Boiling Point (ERBP)	°C	250 min.	260 min.	FMVSS 116 SAE J1704 ISO 4925
Wet Equilibrium Reflux Boiling Point (WERBP)	°C	165 min.	170 min.	FMVSS 116 SAE J1704 ISO 4925

Viscosity at -40 °C		mm ² /s	750 max.	750 max.	FMVSS 116 SAE J1704 ISO 4925
Viscosity at 100 °C		mm ² /s	1.5 min.	1.5 min.	FMVSS 116 SAE J1704 ISO 4925
pH		-	7-11.5	7-11.5	FMVSS 116 SAE J1704 ISO 4925
Fluid Stability (High temperature)		°C	± 3	± 3	SAE J1704 ISO 4925
Fluid Stability (Chemical)		°C	± 3	± 3	SAE J1704 ISO 4925
Effect on SBR Rubber	70 °C	Increase of diameter, mm	0.15-1.4	0.15-1.4	FMVSS 116 SAE J1704 ISO 4925
		Hardness decrease (IRHD)	10 max.	10 max.	
		Disintegration	none	none	
	120 °C	Increase of diameter, mm	0.15-1.4	0.15-1.4	
		Hardness decrease (IRHD)	15 max.	15 max.	
		Disintegration	none	none	
Effect on EPDM Rubber	70 °C	Volume increase, %	0-10	0-10	SAE J1704 ISO 4925
		Hardness decrease (IRHD)	10 max..	10 max.	
		Disintegration	none	none	
	120 °C	Volume increase, %	0-10	0-10	
		Hardness decrease (IRHD)	15 max.	15 max.	
		Disintegration	none	none	
Fluidity and appearance at low temperatures	-40 °C	Appearance	As before test	As before test	FMVSS 116 SAE J1704
		Sludging, sedimentation	none	none	
		crystallisation or stratification			
	Flow time, secs	10 max.	10 max.		
	-50 °C	Appearance	As before test	As before test	

		Sludging, sedimentation crystallisation or stratification	none	none		
		Flow time, secs	35 max.	35 max.		
Water tolerance	-40 °C	Appearance	As before test	As before test	FMVSS 116 SAE J1704	
		Sludging, sedimentation crystallisation or stratification	none	none		
		Flow time, secs	10 max.	10 max..		
	60 °C	appearance	As before test	As before test		
		Stratification	none	none		
		Sediment, % v/v	0.15 max.	0.15 max.		
Wet corrosion	Wt. change (mg/cm ²)	Tinned iron	± 0.2 max.	± 0.2 max.	FMVSS 116 SAE J1704	
		Steel	± 0.2 max.	± 0.2 max.		
		Aluminum	± 0.1 max.	± 0.1 max.		
		Cast iron	± 0.2 max.	± 0.2 max.		
		Brass	± 0.4 max.	± 0.4 max.		
		Copper	± 0.4 max.	± 0.4 max.		
	Pitting or etching		none	none		
	pH (after test)		7-11.5	7-11.5		
	Gelling at 23 ± 5 °C		none	none		
	Deposit		No crystalline	No crystalline		
	Sediment, %v/v		0.1 max.	0.1 max.		
	SBR rubber	Increase of diameter, mm		1.4 max.		1.4 max.
			Hardness decrease (IRHD)	15 max.		15 max.
				Disintegration		none
	EDPM Rubber	Volume increase, %		10 max.		10 max.
			Hardness decrease (IRHD)	10 max.		10 max.
				Disintegration		none
Dry corrosion	Wt. change (mg/cm ²)	Tinned iron	± 0.2 max.	± 0.2 max.	SAE J1704	
		Steel	± 0.2 max.	± 0.2 max.		
		Aluminum	± 0.1 max.	± 0.1 max.		
		Cast iron	± 0.2 max.	± 0.2 max.		
		Brass	± 0.4 max.	± 0.4 max.		
		Copper	± 0.4 max.	± 0.4 max.		

	Pitting or etching		none	none	
	pH (after test)		7-11.5	7-11.5	
	Gelling at 23 ± 5 °C		none	none	
	Deposit		No crystalline	No crystalline	
	Sediment, %		0.1 max.	0.1 max.	
	SBR rubber	Disintegration	none	none	
EPDM rubber	Disintegration	none	none		
Compatibility	-40 °C	Sludging sedimentation crystallisation or stratification	none	none	FMVSS 116 SAE J1704
		Stratification	none	none	
	60 °C	Sediment %v/v	0.05 max.	0.05 max.	
Resistance to oxidation	Pitting or etching (tin foil)		none	none	FMVSS 116 SAE J1704
	Gum deposit		Trace only	Trace only	
	Aluminum wt. change mg/cm ²		0.05 max.	0.05 max.	
	Cast iron wt. change mg/cm ²		0.3 max.	0.3 max.	

Handling and Safety

- FOLLOW VEHICLE MANUFACTURER'S RECOMMENDATIONS WHEN ADDING BRAKE FLUID.
- KEEP BRAKE FLUID CLEAN AND DRY. Contamination of brake fluid with dirt, water or other materials may result in brake failure or costly repairs.
- STORE BRAKE FLUID ONLY IN ITS ORIGINAL CONTAINER. KEEP CONTAINER CLEAN AND TIGHTLY CLOSED TO PREVENT ABSORPTION OF MOISTURE.
- CAUTION: DO NOT REFILL CONTAINER AND DO NOT USE FOR OTHER LIQUIDS.
- Minor spills should be soaked up with, sand or absorbent granules.
- Any spills on painted surfaces should be removed as quickly as possible and washed off with water to avoid paint damage.
- Dispose of content / container in accordance with local regulations.
- The compliance with the performance requirements is guaranteed for at least 24 months, as long as the product is kept in its sealed original package and kept at maximum 23 °C and 50 % relative humidity.