

ARKOS BRAKE FLUID DOT 4

Brake Fluid

ARKOS BRAKE FLUID DOT-4 is manufactured with synthetic components like Glycol Ether and Glycols with anti-oxidant inhibitors and other high performance additives, which gives better protection against corrosion and vapour lock.

Benefits

- Exceptional thermal stability
- Excellent chemical stability
- Good water tolerance
- Very good fluidity at low temperatures

Applications

ARKOS BRAKE FLUID DOT-4 is designed for better performance than DOT-3 brake fluid especially with operation at higher temperatures. It has a higher vapour lock point than conventional DOT-3 brake fluid.

It is fully compatible with other fluids meeting FMVSS 116 DOT-3, DOT-4 and DOT-5.1, however it is advised not to mix different grades for superior performance.

It is recommended to change the brake fluid once in TWO years and it is recommended to use the brake fluid completely from the bottle once open.

Performance Specifications

Conditions of use

ARKOS BRAKE FLUID DOT-4 is not compatible with mineral based brake fluid and hence shall not be mixed or used in operating system with mineral oil based brake fluid. Since it is Glycol Ether based it will affect the paintwork; hence any such contact shall be avoided.

Storage

The container shall be stored in cool and dry place. Once open it shall be used immediately; as it is hygroscopic in nature and deteriorate on absorption of moisture. Its self-life is 24 months in sealed condition.

Characteristics (Typical Values)

ARKOS BRAKE FLUID DOT 4				
TEST PARAMETERS	LIMITS FMVSS DOT4	TYPICAL VALUES		
Appearance	Clear, homogenous liquid meets free form Water, dirt, sediments,	Meets the requirement.		

Equilibrium refluxBoiling pt.,0C230min.242Wet ERBP,0C155min.162Kinematics Viscosity, mm2/Sec.1800max.1740a) at minus 40 °C at 100 °C1.5min.2.08Ph Value7.0 to 11.58.65Brake Fluid stability a)High Temperature stability change in ERBP, °C b)Chemical stability °C change in ERBP of mixture °C max.3+0.05 for each degree above 225 °C2Corrosion Test: at 100°C for22
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change in ERBP of mixture ^Q C max. Corrosion Test: at 100₀C for
°C max. Corrosion Test: at 100₀C for
Corrosion Test: at 100 ₀ C for
120hrs.
a)Mass change, mf/cm 2, 0.2 0.0174
max 0.2 0.0184
Tinned Iron0.10.0049
Steel 0.2 0.0278
Aluminum 0.4 0.0292
Cast Iron 0.4 0.0312
Brass No visible pitting or No pitting or
Copper Etching Etching
b) Connection of Metal Strip No jelling No jelling
c) Appearance of test fluid None None
in jar at
23 + 5 <u>°C</u> 0.10Max Nil
d) Crystalline deposit it on 7.0 to 11.5 8.46
the walls No disintegration.
or jar and metal strips. No disintegration as
e) Sediments,% by volume Evidenced by blisters of
f) pH of Test Fluid Sloughing
g) Effect on Rubber 15Max. 5
cup(SBR) 1.6Max 0.32
i) Appearance
ii) Hardness
Decrease(IBHD)
iii) Base Dia Increase. mm

Nature of test	Requirements	Actual
		reading
Fluidity & appearance at law		
temperature		
a)at Minus 40 °C for 144 hrs.		
i)Sludging, Sedimentation	None	None
Crystallisation or stratification.		
ii)Bubble flow time, Second	10Max	3.0
b)at Minus 50 °C for 6hrs.		
i)Sludging, Sedimentation	None	None
Crystallisation or stratification		
ii)Bubble flow time, Second	35Max.	30
Evaporation test at 100 °C		
a)Loss in Mass%	80Max.	59.74
b)Abrasiveness or grittiness	None	None
c)Pour point of residue, °C	< - 5	< - 5
Water Tolerance Test:		
a)at Minus 40 °C for 120hrs.		
i) Clarity	Clear	Clear
ii)Sludging, Sedimentation	None	None
Stratification, or Crystallisation		
iii)Bubble flow time, Second	10Max.	3.1
b)at 60 °C for 24hrs.		
i) Startification	None	None
ii)Sediments, % by Volume	0.15Max.	Nil.
Compatibility test		
a)at – 40 °C for 24hrs.		
i)Clarity	Clear	Clear
ii)Sludging, Sedimentation,	None	None
Crystallisation, or Stratification		
b)at 60 °C for 24hrs.		
i)Stratification	None	None
ii)Sediments, %Volume	0.05Max.	Nil
Resistance to Oxidation		
a)Change in mass mg/cm2		
i) Aluminum	0.05Max.	0.0065
ii)Cast Iron	0.3Max.	0.0271
b)Condition of Metal strips	No visible pitting or etching	No pitting &
	& no gummy deposits.	No deposits.

Effects on Rubber cups (SBR)		
a)at 70 ºC for 70h		
i)Base dia increase, mm	0.17 to 1.6	0.36
ii)Hardness decrease, IRHD	10Max.	5
iii)Appearance	No disintegration as	No
b)at 120 °C for 70h	evidenced by blisters,	disintegration
i)Base dia increase, mm	sloughing & stickiness	0.44
ii)Hardness decrease, IRHD	0.17 to 1.6	6
iii)Appearance	15Max	No
	No disintegration as	disintegration.
	evidenced by blister,	
	sloughing& stickiness.	

<u>Note</u>: Always consult your owner's manual to check for recommended viscosity grade and specifications of oil for your particular vehicle/machine/equipment.



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