S-OIL

S-OIL SEVEN

BRAKE FLUID DOT 3

Product Description

S-OIL 7 Brake Fluid DOT-3 is highly efficient brake fluid combined with high purity glycols, glycol ethers, metal corrosion inhibitors and anti-oxidants.

Due to its high boiling point, S-OIL 7 Brake Fluid DOT-3 does not deform at the operating temperature of the brake system and prevent vapor lock. In addition, it has excellent rust inhibiting ability to inhibit corrosion of metals and deterioration of rubber.

In particular, S-OIL 7 Brake Fluid DOT-3 has proven long-term compatibility, making it suitable for all vehicles, regardless of manufacturer.

Applications

- ❍ Automobile manufacturing line
- ❍ All models with hydraulic brake system

Features and Potential Benefits

- ❍ High boiling point and wet boiling point (prevent Vapor lock)
- ❍ Superior metal corrosion protection
- ❍ Rubber compatibility (SBR, EPDM Rubber)
- ❍ Excellent low temperature stability and thermal stability

Performance Level

- ❍ Recommended for use where the following specifications are called for :
  KS M 2141 Type3, FMVSS 116 DOT-3, SAE J1703, ISO 4925 Class3, JIS K 2233 Type3(BF-3)

Typical Properties

Test Items		Method	Unit	Properties
Density	20℃	FMVSS 116	g/cm^3	1.05 ~ 1.06
pH		[Same as above]	-	7.0 ~ 11.5
Boiling point			℃	Min. 205
Wet Boiling point			℃	Min. 140
Viscosity	-40℃		cSt	Max. 1500
	100℃		cSt	Min. 1.5
High-temperature stability			℃	Max. ±5 ℃
Chemical stability			℃	Max. ±5 ℃
Metal Corrosion	100℃, 120h			
[Metal]				
Tinned iron			mg/cm^2	Max. ±0.2
Steel				Max. ±0.2
Aluminum				Max. ±0.1

Cast iron				Max. ±0.2
Brass		FMVSS 116		Max. ±0.4
Copper		[Same as above]		Max. ±0.4
Appearance				No roughening and pitting
[Liquid]				
Appearance				No jelling
Sedimentation			vol%	Max. 0.1
pH				7.0 ~ 11.5
[Rubber cup (SBR)]				
Blisters or sloughing				No blisters and sloughing
Decrease in hardness			IRHD	Max. 15
Increase in base diameter			mm	Max. 1.4
Fluidity in low temperature				
Stratification, precipitate and crystallization	-40℃, 144h			Clear and no stratification
Bubble flow time			sec	Max. 10
Appearance on room temp.				Same as before test
Stratification, precipitate and crystallization	-50℃, 6h			Clear and no stratification
Bubble flow time			sec	Max. 35
Appearance on room temp.				Same as before test
Water tolerance				
Appearance	-40℃, 22h			Clear and homogeneous
Stratification & precipitate				No stratification and precipitate
Bubble flow time			sec	Max. 10
Stratification & precipitate	60℃, 22h			No stratification and precipitate
Sediments			vol%	Max. 0.15
Compatibility/Miscibility				
Appearance	-40℃, 22h			Clear and homogeneous
Sediments				Not allowed
Appearance	60℃, 22h			Clear and homogeneous
Stratification, precipitate			vol%	Max. 0.05

Resistance to oxidation	FMVSS 116		
Aluminum	[Same as above]	mg/cm^2	Max. ±0.05
Cast iron			Max. ±0.3
Appearance			No roughening and pitting
Effect on rubber			
[SBR]			
70℃, 70h			
Decrease in hardness		IRHD	Max. 10
Increase in base diameter		mm	0.15 ~ 1.4
Appearance			No blisters and sloughing
120℃, 70h			
Decrease in hardness		IRHD	Max. 15
Increase in base diameter		mm	0.15 ~ 1.4
Appearance			No blisters and sloughing
Stroking Test		Simulated service test is satisfied.	

Storage

- ❍ Seal when stored to prevent exposure to moisture and air.
- ❍ It should not be mixed with mineral oil / silicone brake fluid and mineral oil (engine oil, gasoline, kerosene, etc.).
- ❍ In case of contact with skin, wash immediately. If swallowed, immediately vomit and get medical prescription.
- ❍ Avoid fire. If it gets on the paint surface wash with water immediately as it may cause damage.

Disposal

- ❍ When disposing of used brake fluid, it must be disposed of at an authorized site or workplace, and not disposed of directly to sewer or soil.

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This lubricant used recommended and for the application for which it has been designed does not present any particular risk.
A material safety data sheet is obtainable via your commercial adviser.