

## DOT5.1 Synthetic Brake Fluid

### Advantages

- ⊙ Boric acid ester brake fluid with high boiling point of dry/wet equilibrium reflux, small viscosity at low temperature, outstanding high/low temperature property
- ⊙ Excellent anti-rust, anti-corrosion, anti-oxidation and compatibility with rubber, ensuring safe and stable braking actions

### Performance specification

The product meets the following specifications:

- ⊙ FMVSS NO.116 DOT5.1
- ⊙ GB 12981-2003 HZY5

### Applications

- ⊙ Suitable for brake system and clutch system of various high class passenger cars, engineering machinery and heavy duty vehicles with hydraulic brake, meeting application requirements of vehicles under freezing and torrid weather conditions

### Typical properties

Items		Specifications	Typical properties		
Equilibrium reflux boiling point (ERBP), °C		≥260	270		
Wet equilibrium reflux boiling point (WERBP), °C		≥180	184		
Kinematic viscosity (-40°C), mm <sup>2</sup> /s		≤900	810		
Kinematic viscosity (100°C), mm <sup>2</sup> /s		≥1.5	2.110		
pH		7.0~11.5	7.8		
Metal corrosivity (100°C, 120h) Mass variation, mg/cm <sup>2</sup>	Tin	±0.2	0.00		
	Steel	±0.2	0.00		
	Aluminium	±0.1	0.00		
	Cast iron	±0.2	0.00		
	Red copper	±0.4	0.02		
	Brass	±0.4	0.03		
	Zinc	±0.4	0.05		
Evaporation property (100°C, 168h)		Evaporation loss, %	≤80		
		Residuum pour point, °C	≤-5		
Rubber compatibility (70h)	SBR cup	70°C	Root cylinder increment, mm	0.15~1.4	0.62
			Hardness variation, IRHD	0~10	5
	cup	120°C	Root cylinder increment, mm	0.15~1.4	0.78
			Hardness variation, IRHD	0~15	6
	EPDM cup or test piece	70°C	Volume change, %	1~10	1.80
			Hardness variation, IRHD	0~10	3
		120°C	Volume change, %	1~10	2.45
			Hardness variation, IRHD	0~15	3

### Precautions in application

- ⊙ Avoiding splash on surface of painted part
- ⊙ With hygroscopicity, requiring airtight storage after unsealing
- ⊙ Avoiding pollution from dirt, mineral oil, fuel and water, otherwise causing malfunction brake
- ⊙ With toxic materials such as diol, polyglycol ether, avoiding eating by accident, keeping out of reach of children