



Previous Name: Shell Donax UB

# Shell Brake and Clutch Fluid *DOT 4 Ultra*

*High boiling point, high performance DOT 4 brake fluid*

Shell Brake and Clutch Fluid DOT 4 Ultra is a very high boiling point brake system and hydraulic clutch fluid for systems requiring a FMVSS No. 116 DOT 4, ISO 4925 Class 4, or many other equivalent specifications in a borate ester (borate ester of polyglycol-ether) brake fluid.

## DESIGNED TO MEET CHALLENGES

### Performance, Features & Benefits

#### High boiling Point

Shell Brake and Clutch Fluid DOT 4 Ultra exceeds requirements for wet and dry equilibrium reflux boiling points (Wet ERBP and Dry ERBP) to help prevent vapour lock resulting from boiling of the brake fluid even under the harshest conditions such as racing. Shell Brake and Clutch Fluid DOT 4 Ultra meets DOT 5.1 boiling point performance but with higher low temperature viscosity. This offers superior resistance to boiling and associated vapour lock compared to other DOT 4 brake fluids.

#### Corrosion protection

Shell Brake and Clutch Fluid DOT 4 Super protects internal components from corrosion under normal use and service.

### Main Applications

- Suitable for applications requiring a DOT 4 performance level brake fluid. Shell Brake and Clutch Fluid DOT 4 Super may be substituted when a DOT 3 fluid is required.

- Motorcycles, passenger cars and medium trucks of a variety of makes and models.
- Hydraulic brake systems.
- Hydraulic clutch systems.
- Fully miscible with other DOT 3 or 4 brake fluids.

### Specifications, Approvals & Recommendations

- USA FMVSS No. 116 DOT 4
- ISO 4925 Class 4
- JIS K 2233 Class 5
- AS/NZ 1960 Class 3
- SAE J1704

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk, or the OEM Approvals website.

### Typical Physical Characteristics

Properties			Method	Shell Brake and Clutch Fluid DOT 4 Ultra
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	FMVSS No. 116 5.13	1200
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	FMVSS No. 116 5.13	2.6
Density	@20°C	kg/m <sup>3</sup>	ASTM D4052	1050-1100
Water Content		%	ASTM D1364	<0.2
pH (FMVSS No 116)			5.14	7.2
Dry ERBP (FMVSS No. 116)		°C	5.11	290
Wet ERBP (FMVSS No. 116)		°C	5.12	195

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

## Health, Safety & Environment

### ■ Health and Safety

Shell Brake and Clutch Fluid DOT is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

### ■ Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

## Additional Information

### ■ Advice

Advice on applications not covered here may be obtained from your Shell representative.