



Formerly Known As: PANOLIN Biofluid PRS 32

Shell PANOLIN *Biofluid PRS 32*

- Versatile application
- Readily Biodegradable

UTTO Lubricant - readily biodegradable

Shell PANOLIN Biofluid PRS 32 is a readily biodegradable universal tractor transmission oil (UTTO) with good wear protection that prevents gumming and deposits. PANOLIN Biofluid PRS 32 is designed for use in transmissions, hydraulic systems, oil immersed brakes and other ancillary systems fitted to agricultural tractors and off-road equipment.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Wear Protection**

Prevents gumming and deposits of ageing products even under high thermal load.

- **Design to protect against cold**

The excellent low temperature fluidity of PANOLIN Biofluid PRS 32 results in responsive hydraulic performance and smooth performance from cold starts.

- **Maintaining System Efficiency**

Excellent air release helps to reduce foaming.

- **Lower Environmental Impact**

Recommended for use in environmentally sensitive areas - offers reduced impact of leak or accidental spillage into the environment compared to conventional mineral oils. Readily biodegradable, biodegraded by over 60% after 28 days in the OECD 301 B carbon dioxide evolution test. Low Ecotoxicity, classified as 'not harmful' to bacteria, algae, freshwater and marine invertebrates, and fish when tested as water-accommodated fractions (WAFs) according to OECD and EPA test guidelines.

Main Applications



- **WARNING!**

Not to be used as Engine Oil.

Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk

Compatibility & Miscibility

- It is strongly recommended that an oil sample is taken from the system following changeover and analysed via the Shell Rapid Lubricants Analysis service to confirm the new fluid charge is fit for use.

- **Fluid Compatibility**

Shell PANOLIN Fluids are miscible with mineral oils.

However, in order to ensure that the environmental properties and performance of Shell PANOLIN Fluids are maintained, the system should be drained and flushed thoroughly when changing fluids.

Typical Physical Characteristics

Properties			Method	Shell PANOLIN Biofluid PRS 32
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	29.8
Pour Point		°C	ASTM D97	-53
Flash Point		°C	ASTM D92	215
Density	@15°C	kg/m ³	ASTM D4052	897

These characteristics are typical of production, variations in these characteristics may occur.

Health, Safety & Environment

- **Health and Safety**

This product 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 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.

- **Additional Technical Advice**

The information and guidance offered for use of Shell PANOLIN products is based on experience and understanding gained through the development and manufacturing of lubricants. The performance of the products can be influenced by a number of variables, not limited to, contamination, operating temperature, equipment application, external environment and material type. It is recommended that you discuss application and fluid recommendations with both your OEM and local Shell technical representative before the product is used. Advice given is non binding and Shell will not be held liable for any consequence as a result of or through misuse of the fluid.