



Previous Name: **Shell Oil 4697**

Shell **Diala Cable Oil**

Electrical insulating oil

- **RELIABLE PERFORMANCE**
- **MEETS IEC 60867**

Shell Diala Cable Oil is a high performance electrical insulating oil manufactured from alkylbenzenes.

Applications

Shell Diala Cable Oil is recommended for use as impregnant in high voltage hollow core cables and capacitors.

It is also recommended for electrical bushes where the application demands a high level of gas absorption.

Advice on applications not covered in this leaflet may be obtained from your Shell Representative.

Performance Features and Advantages

- **System protection**
Shell Diala Cable Oil is non-corrosive towards copper, without the need for passivation.
- **Reliable operation**
The outstanding gas absorption properties of the oil makes it particularly reliable in all applications where the oil is exposed to high electrical field stress and compact design

Specification and Approvals

Shell Diala Cable Oil meets the following specifications:

IEC 60867 Class I (Alkylbenzenes)

Storage precautions

The critical electrical properties of Shell Diala Cable Oil are easily compromised by trace contaminations with foreign material. Typically encountered contaminants include moisture, particles, fibres and surfactants. Therefore, it is imperative that electrical insulating oils be kept clean and dry.

It is strongly recommended that storage containers be dedicated for electrical service and include air-tight seals. It is further recommended that electrical insulating oils be stored indoors in climate-controlled environments.

Health and Safety

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet which can be obtained from your Shell representative.

Shell Diala Cable Oil is free from polychlorinated biphenyls (PCB).

Protect the environment

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



Typical Physical Characteristics

Property	Units	Method	IEC 60867, Class I	Shell Diala Cable Oil
Appearance		IEC 60867	Clear, free from sediment and suspended matters	Complies
Density at 20 °C	kg/m ³	ISO 3675	850 - 880	857
Kinematic viscosity at 20 °C	mm ² /s	ISO 3104	-	7,5
Kinematic viscosity at 40 °C	mm ² /s	ISO 3104	Max. 6	4,2
Flashpoint P.M.	°C	ISO 2719	Min. 110	140
Pourpoint	°C	ISO 3016	Max. -45	<-60
Neutralisation value	mg KOH/g	IEC 62021-1	Max. 0,03	< 0,03
Corrosive Sulphur		IEC 62535	-	Not corrosive
Breakdown voltage	kV	IEC 60156	Min. 30	>30
Dielectric dissipation factor (DDF) at 90 °C		IEC 60247	Max. 0,002	<0,001
Gassing Tendency	mm ³ /min	IEC 60628A	Max. -20	< -20

These characteristics are typical of current production.

Whilst future production will conform to Shell's specification, variations in these characteristics may occur.