



SHELL DIALA[®] OIL HFX

Electrical insulating oil

Product Description

Shell Diala[®] Oil HFX is a fire-resistant, inhibited electrical insulating fluid, for use in electrical systems where low flammability and improved fire safety characteristics are desired.

Applications

- intended for use in transformers, circuit breakers, oil-filled switches and switchgears
- increases fire resistance in all equipment using mineral electrical oils.

Features and Benefits

- excellent electrical characteristics and cooling performance
- provides an extra margin of safety in hazardous locations and indoor facilities
- no special handling or equipment required beyond that used for conventional transformer oils
- compatible and miscible with conventional transformer oils
- recyclable

Approvals:

- NEC Sec. 450-23
- ASTM D 5222
- Factory Mutual Research Corporation (FM)
- Underwriter's Laboratories (UL) Classified for Fire Hazard (see product marking for details)



Typical Product Properties for Shell Diala[®] Oil FX

	Test Method	
Product Code		69729
Appearance	D 1524	bright and clear
Density @ 15°C kg/rm ³	D 1298	860 (.860 g/cc)
Kinematic viscosity @ 0°C mm ² /s (cSt) @ 40°C mm ² /s (cSt) @ 100°C mm ² /s (cSt)	D 445 D 445 D445	1820 110 12.4
Flash point COC °C	D 92	282.2 C (540 F)
Fire point COC °C	D 92	304 C (579 F)
Pour Point °C	D 97	-27
Neutralization value mg KOH/g	D 974	0.006
Corrosive sulfur	D 1275	non-corrosive
Breakdown voltage kV	D 877	>50
Power Factor at 25°C	D 924	0.001 %
Power Factor at 100°C	D 924	0.103 %
Inorganic Chlorides and Sulfates	D 878	None
Oxidation stability (72 h) Neutralization number mg KOH/g Sludge %m	D 2440	<0.01 0.01
Oxidation stability (164h) Neutralization number mg KOH/g Sludge %m	D 2440	0.01 0.02
Aniline Point °F	D 611	219

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

Storage Precautions

The critical electrical properties of Shell Diala[®] Oil HFX are easily compromised by minute concentrations of contaminants. Typically encountered contaminants include moisture, particulates, fibers 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 oil service and include airtight seals. It is further recommended that electrical insulating oils be stored indoors in climate-controlled environments.

Handling & Safety Information

Shell Diala[®] Oil HFX contains no polychlorinated biphenyls (PCB). For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <http://www.shell-lubricants.com/msds/>. If you are a Shell Distributor, please call 1+800-468-6457 for all of your service needs. All other customers, please call 1+800-840-5737 for all of your service needs. Information is also available on the World Wide Web: <http://www.shell-lubricants.com/>.