# **IDO Universal**

## Monograde Diesel Engine Oil

#### Features & benefits

- Combats corrosion and moisture
- Low ash less than 1% weight
- Excellent hydraulic oil (SAE 10W and 30)
- Suitable for truck manual transmissions (SAE 50)
- Promotes engine cleanliness
- Excellent resistance to high temperatures



### **Specifications**

✓ Meets requirements

Specification	10W	30	40	50
API CF	✓	✓	✓	✓
API CF-2	-	✓	✓	✓
API SF	✓	✓	✓	✓
Allison C4	✓	✓	✓	✓
CAT TO-2	✓	✓	✓	✓
Detroit Diesel- 7SE270	-	✓	✓	-

## Typical results

Test Method	10W	30	40	50
SAE GRADE	10W	30	40	50
VISCOSITY (D445) cSt @ 40°C cSt @ 100°C	39.0 6.6	88.5 11.3	126.0 14.2	190.0 18.4
VISCOSITY INDEX (D2270)	123	116	112	107
ASTM COLOUR (D1500)	3.0	4.0	4.0	4.5
<b>DENSITY @ 15°C</b> (D4052), kg/L	0.86	0.88	0.88	0.89
POUR POINT (D97), °C	-40	-33	-26	-20
FLASH POINT (D93), °C	200	204	206	200
TOTAL BASE NUMNER (D2896), mgKOH/g	7.3	7.6	7.7	7.9

#### Sizes & order codes

Size	10W	30	40	50
946 mL (1 US QT)	F0008915	F0009315	-	-
5 L (1.32 US gal)	-	F0009330	F0009430	-
18.9 L (5 US gal)	F0089040	F0089440	F0089540	F0089640
205 L (54.2 US gal)	F0014550	F0014350	F0014450	F0122550
1000 L (264 US gal)	F0008960	F0009360	-	-
1000 L (264 US gal) Bulk Tote	F0106301	-	F0009401	-
Bulk	B0008901	B0009301	B0009401	B0009501



**IDO Universal** oils are blended from select high-quality base stocks and low-ash additives. This formulation has added detergent to ensure engine cleanliness, minimize ring-sticking, and reduce liner-scuffing.

**IDO Universal** oils prevent sludge formation, reduce bearing corrosion and cut back on engine rusting.

IDO Universal was developed to meet the needs of mixed fleet operators to reduce inventory. This oil can be used in high-speed diesel engines, construction diesel engines and some marine diesel engine applications.

**IDO Universal** all grades meet or exceed Allison C-4 specifications for use in their heavy-duty automatic transmissions.

**IDO Universal** 30 & 40 grades are prime recommendations for Detroit Diesel 2-cycle engines.

**IDO Universal** oils can also be used as hydraulic oils where appropriate if extra care is taken not to mix them with regular hydraulic oils.