



# Product Data Sheet



## Monarch Diesel Ultra Syn-P

### Heavy Duty Full Synthetic Diesel Engine Oil

Monarch Diesel Ultra Syn oils are formulated with a full synthetic base oils including PAO (PolyAlphaOlefin) as well as a tailored additive package. This top of the line motor oil is designed for extended drain service in the most demanding applications. This oil meets or exceeds API Service Category CJ-4/SN, as well as the latest OEM's (Original Equipment Manufacturers) for the following engine specification:

- EGR (Exhaust Gas Re-circulation)
- ACERT (Advanced Combustion Emission Reduction Technology)
- DPF (Diesel Particulate Filter) technology
- And other exhaust after treatment devices

Monarch Diesel Ultra Syn also provides an extended drain service in conventional engines by offering a higher oil film thickness, great wear performance and outstanding oxidation control at higher temperatures. These properties allow for a longer engine life as well as minimized component wear.

#### Performance Features:

- Meets the needs of today's high-performance, fuel efficient, low emission diesel and gasoline engines.
- Advanced corrosion protection.
- Superb oxidation stability, valve train wear and deposit control.
- Excellent protection of modern engines in addition to older models.

#### Customer Benefits:

- Up to 5% on fuel economy performance
- Outstanding protection of engine hardware throughout the drain interval
- Better cold flow properties for easier starting in colder weather
- Overall increased engine protection
- Superior shear stability for better viscosity control
- Reduction of high temperature deposits

#### Applications:

- For use in heavy-duty diesel engines, both on-highway and off-highway, heavy duty vehicles used for construction and mining.

Meets or Exceeds Specifications		
API SN	API CJ-4	API CI-4
API CG-4	CAT ECF-2	API CI-4 PLUS
API SM	API CH-4	CAT ECF-3
Cummins CES 20076	Cummins CES 20077	Mack EO-M Plus





## Typical Properties

### Monarch Diesel Ultra Syn-P 10W30

Product Number	136P	132P	Test Method
SAE Viscosity Grade	5W-40	10W-30	-
<b>Kinematic Viscosity</b>			
@40°C cSt	87.3	65.6	ASTM D445
@100°C cSt	13.89	11.2	
Viscosity Index	163	165	ASTM D2270
Specific Gravity	0.852	-	
Flash Point °C	236	230	ASTM D92
Pour Point °C	-48	-40	ASTM D97
TBN	8.7	10	ASTM D2896
Lbs./Gal	7.10	-	-

These properties are typical of the current production. Variations that do not affect product performance are to be expected depending on blending and manufacturing locations. The information above is subject to change without notice.

#### Health and Safety:

This product is unlikely to have any adverse health implications or safety hazards when used for its intended application. Avoid contact with skin, use resistant gloves when handling used oil. If skin comes in contact wash immediately with soap and water. For complete information on safe handling and product characteristics please refer to the Safety Data Sheet (SDS) found on our website. [www.royalmfg.com](http://www.royalmfg.com) or call (918)-584-2671.

#### Packaging options:



5 Gal. Pails



55 Gal. Drums



275/330 Gal. Totes



Bulk