

## VALCO E-PROTECT 5.2

Synthetic engine oil 10W-30 GF-6

Top of the range synthetic engine oil ensuring engine cleanliness, protection against wear and fuel economy. It also offers protection against damage induced by LSPI (Low Speed Pre-Ignition).

VALCO E-PROTECT 5.2 is especially intended for hybrid vehicles equipped with gasoline engines, in particular Asian manufacturers, when SAE 10W-30 viscosity grade and API SP or ILSAC GF-6A performance level are required.

### Specifications

- ✓ API SP-RC
- ✓ ILSAC GF-6A

### Physicochemical Characteristics

| Characteristics             | Method      | Unit     | Typical value | Min. | Max.  |
|-----------------------------|-------------|----------|---------------|------|-------|
| Viscosity grade             | SAE J300    | -        | 10W-30        | -    | -     |
| Kinematic viscosity @ 100°C | ASTM D 7042 | cSt      | 10.5          | 10.3 | 12.5  |
| Kinematic viscosity @ 40°C  | ASTM D 7042 | cSt      | 63            | -    | -     |
| Viscosity index             | ASTM D 2270 | -        | 154           | -    | -     |
| CCS viscosity @ -25°C       | ASTM D 5293 | mPa.s    | 3300          | -    | 7000  |
| HTHS viscosity @ 150°C      | ASTM D 4683 | mPa.s    | 3.1           | 2.9  | -     |
| MRV viscosity @ -30°C       | ASTM D 4684 | mPa.s    | 11800         | -    | 60000 |
| Density @ 20°C              | ASTM D 7042 | -        | 0.845         | -    | -     |
| Pour point                  | ASTM D 97   | °C       | -38           | -    | -     |
| Flash point                 | ASTM D 92   | °C       | 241           | -    | -     |
| T.B.N.                      | ASTM D 2896 | mg KOH/g | 7.1           | 6.6  | 7.6   |
| Spectrometric analysis      | ICP         | ppm      |               |      |       |
| Phosphorus                  |             |          | 750           | 600  | 800   |
| Zinc                        |             |          | 820           | -    | -     |
| Calcium                     |             |          | 1000          | -    | -     |
| Magnesium                   |             |          | 600           | -    | -     |
| Sulfur                      |             |          | 2650          | -    | 5000  |
| NOACK volatility            | ASTM D 5800 | % mass   | 7.6           | -    | 15.0  |
| Colour                      | ASTM D 1500 | -        | 3.0           | -    | 4.0   |

### Security

See Safety Data Sheet