

## STÄRK Fully Synthetic Gasoline Engine Oil SAE 5W50 SN/CF

### Product Description

**STÄRK 5W-50 SN** is an advanced, fully synthetic engine oil developed for high-performance and high-rev engines operating in severe conditions. Designed to deliver maximum protection across a broad range of operating temperatures, this oil provides optimal lubrication, stability, and wear protection even under extreme conditions. STÄRK 5W50 SN meets or exceeds the stringent requirements of high-performance and racing applications, ensuring your engine operates at peak performance without compromise.

### Performance Benefits

- **Ultimate Wear Protection:** Reinforced additive system ensures robust protection against wear and tear, prolonging engine life, even under the stress of high-rev and heavy-load operations.
- **High Viscosity Index:** Maintains oil stability and viscosity under varying temperatures, providing optimal lubrication and performance across a wide range of conditions.
- **Excellent Thermal Stability:** Advanced synthetic formulation resists oxidation and oil breakdown at high temperatures, ensuring extended oil life and minimizing sludge formation.
- **Cold Start Protection:** Exceptional flow properties at low temperatures ensure rapid oil circulation during startup, reducing engine wear in cold climates.
- **Shear Stability:** High shear stability maintains viscosity, ensuring a strong protective oil film at high operating temperatures.

### Health, Safety, and Environment

- Avoid prolonged or repeated skin contact with used engine oil.
- Dispose of used oil properly at authorized collection points; avoid discharge into drains, water, or soil.
- For detailed safety guidelines, refer to the product's Safety Data Sheet (SDS).

### Application

**STÄRK 5W-50 SN** is recommended for a variety of high-performance gasoline and light diesel engines, including turbocharged and naturally aspirated configurations. It is ideally suited for engines subjected to high load and temperature, such as those in motorsport, rally, and performance street vehicles. Compatible with fuels such as gasoline, LPG, biofuels, and ethanol, this formulation is not suitable for engines equipped with Diesel Particulate Filters (DPF).

### Meets and Exceeds

#### Meets

- API SN/CF
- ACEA A3/B4

#### OEM Approvals

- MB-Approval 229.1/229.3
- Porsche A40
- VW 502.00 / 505.00
- FIAT 9.55535-M2

### User Advice

- **Application:** For optimal performance, follow vehicle manufacturer recommendations for oil grade and service intervals.
- **Compatibility:** This oil can be mixed with commercially available motor oils. However, using it alone without mixing ensures maximum performance.
- **Storage:** Store in a cool, dry place below 60°C, avoiding direct sunlight and extreme temperatures to preserve quality.



## Typical Properties

| Property                    | Test Method   | Value                    |
|-----------------------------|---------------|--------------------------|
| Viscosity Grade             | SAE J300      | 5W-50                    |
| Density @ 15°C              | DIN 51757     | 0.8461 g/cm <sup>3</sup> |
| Kinematic Viscosity @ 40°C  | ASTM D7042-04 | 104.8 mm <sup>2</sup> /s |
| Kinematic Viscosity @ 100°C | ASTM D7042-04 | 17.75 mm <sup>2</sup> /s |
| Viscosity, MRV @ -35°C      | ASTM D4684    | 22,500 mPas              |
| Viscosity, CCS @ -30°C      | ASTM D5293    | 6005mPas                 |
| Viscosity Index             | DIN ISO 2909  | 188                      |
| High Temp High Shear (HTHS) | ASTM D5481    | 4.2 mPas                 |
| Pour Point                  | DIN ISO 3016  | -39°C                    |
| Flash Point                 | DIN ISO 2592  | 222°C                    |
| Evaporation Loss (Noack)    | ASTM 5800B    | 9.50%                    |
| Total Base Number (TBN)     | DIN ISO 3771  | 10.1 mg KOH/g            |

