



TECHNICAL DATASHEET

Excellium Pro Concentrate Plus – Premium multifunctional additive package for Diesel fuel

Use & application

Excellium Pro Concentrate Plus is a new high-performance multifunctional additive package (deposit control, corrosion inhibitor, demulsifier, antioxidant, friction modifier) **dedicated to professional users of Diesel engine equipments** (passenger cars, trucks and bus fleet, off-road vehicles for mining or construction sites, power generation). It offers **new features** adapted to the new engine technologies and fuel evolutions, including with high amounts of biosourced bases: engines are cleaner and friction losses of fuel injection equipment are reduced. Each of these properties contributes to **fuel economy** and better **emissions control**.

Treatment rate

The recommended treatment rate is 700 ppm vol./vol. (0.7L/1000L) in the Diesel fuel.

Properties & benefits

Excellium Pro Concentrate Plus has been extensively tested on the standard protocols of the industry (ISO/ASTM laboratory tests and CEC engine tests) besides TotalEnergies' internal test protocols in order to confirm its actual performances for the end-user:

- Provides **fuel savings up to 3.3%** assessed in different applications.
- Reduces **CO₂ emissions up to 3.3%** and **up to 60% of particulates**.
- Prevents up to 99% of fouling of injectors.
- Cleans up to 97% of existing fouling of injectors.
- Increase diesel fuel cetane about +2/+3pt (combustion improvement)
- Reduces engine wear.
- Protects the fuel installations from corrosion.
- Increases oxidation stability especially for fuel containing FAME (biodiesel).
- Works from the first tank filling.

Excellium Pro Concentrate Plus does not modify Diesel fuel properties (colour, dehazing, demulsification, cold properties...). It is fully organic (ashless) and does not contain halogenated or metal-based compounds.

Excellium Pro Concentrate Plus contains a lab-marker which help to warranty the TotalEnergies manufacturing.



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Characteristics

CHARACTERISTIC	UNITS	TYPICAL VALUE	METHODS
Appearance		Orange clear liquid	Visual
Density at 15°C	kg/m ³	920 – 950	EN ISO 12185
Flash Point	°C	≥ 63	ASTM D93 / EN ISO 2719
Pour Point	°C	≤ -33	ASTM D97 / NF T 60-105
Kinematic viscosity at 20°C	mm ² /s	12 – 18	ASTM D445 / EN ISO 3104

Storage, handling & blending

Excellium Pro Concentrate Plus can be stored and handled from -20 to +40°C (bulk) / +50°C (drums, IBC). Stainless steel, PET or Teflon® coating can be used as preferred materials to make storage capacities and injection systems. Rubber (natural or synthetic), polypropylene and polystyrene are banned.

Excellium Pro Concentrate Plus can be stored under normal conditions for up to 24 months.

The recommended injection methods are line injection or injection in a recirculation loop for storage tanks. For occasional use, **Excellium Pro Concentrate Plus** can be poured directly into the storage tank or directly in the vehicle fuel tank before it is filled with the Diesel fuel.

Precautions for use

Excellium Pro Concentrate Plus presents some of the hazards associated to additives or petroleum products (risk-phrase H-302, H-304, H-315, H-317, H-319, H-411) and it is necessary to avoid any contact with eyes and skin and not to inhale the vapours. It is highly recommended to wear safety equipment devices (gloves, safety glasses) when handling the product. For further details about handling conditions and the product's toxicology, please consult the relevant material safety data sheet.

Excellium Pro Concentrate Plus (contains 2-Ethylhexyl nitrate; EUH-044) breaks down at temperatures above 100 °C and there is a risk of explosion when heated in a confined space. **Excellium Pro Concentrate Plus** should not therefore be stored in tanks and/or transfer lines with heaters or tracing. Loading and mixing pumps must be fitted with a temperature sensor in the product to stop the pump and a system to reduce the pressure in the event of overheating. For further details about the product handling, please consult the Document 86 of ATC (best practices manual).

Components of this product have been registered according to REACH requirements (REACH Regulation EC 1907/2006).

Packaging

Excellium Pro Concentrate Plus is exclusively produced in France (EU27) and is available with the following packaging: 1000L container, 185kg drums, 5L cans.