

EcoPar[®]

An ultraclean fuel for diesel engines!

EcoPar is an ultraclean engine fuel for ordinary diesel engines (Swedish pat. No. 522 918, other patents pending). Compared to diesel oil, emissions of many carcinogenic substances decrease by more than 90%. The content of NO₂ in the surroundings decrease by up to 50%.

The amount of visible soot is reduced, and the total toxicity of the emissions decreases considerably. Net emissions of carbon dioxide (CO₂) decrease by 30 to 50% measured over the whole lifecycle according to ISO 14040.

Users that earlier have been troubled by diesel engine emissions experience dramatic reductions of negative health effects. Common health discomforts from diesel exhaust are headaches, nausea, and irritation of eyes, nose, throat and skin.

EcoPar is suitable for all applications where work in diesel emissions cannot be

avoided, e.g. construction and building, mining, park and road maintenance, inner city vehicles, forestry, storages, waste handling, etc.

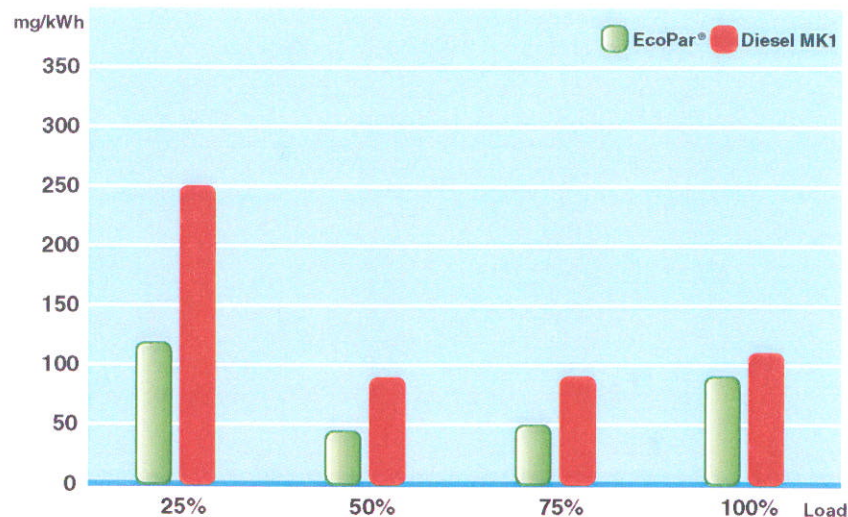
Due to the low risks to health and the environment EcoPar is not classified as hazardous goods according to the international ADR/RID, IMO and IATA-regulations.

EcoPar is not toxic to water organisms, and is therefore especially well suited for use in or close to water protection areas, natural reserves, and other sensitive wildlife areas. »



EcoPar is suitable where workers or the public are subjected to diesel engine emissions, e.g. in inner city traffic, boats and ships, forestry and park maintenance.

Emissions of particles @ 1500 rpm



Emissions of soot from a heavy engine with particle trap (DNOx) and EGR (Emission Gas Recycling). Measurements performed by STT Emtec, Sundsvall. "Diesel MK1" is the Swedish Ultralow sulphur diesel (less than 10 ppm sulphur).

EcoPar fulfills European standard for diesel fuel EN590 and the U.S. standard for diesel oil, ASTM D975, and can therefore be used in all types of engines, burners, and vehicles where diesel fuel is used today, e.g. buses and trucks, heaters, forestry machines, compactors, and grass mowers. EcoPar also fulfills the requirements for "premium" diesel fuel according to the U.S. National Conference of Weights and Measures (NCWM).

Engine power and torque is similar or somewhat improved with EcoPar com-

pared to low sulphur diesel. Fuel consumption is usually similar or slightly decreased with EcoPar.

EcoPar has undergone thorough testing in all sorts of climates for millions of kilometres for over 5 years. Cold start has been tried in temperatures down to below -30° C without problems. Other parameters important for the function of the engine, such as viscosity and lubricity, are similar or slightly improved compared to low sulphur diesel fuel.

References:

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2. "A New Paraphinic Fuel Impact on Emissions and Combustion Characteristics of a Diesel Engine", Dr. S. Gjirja, Professor E. Olsson, A. Eklund, P. Hedemalm, SAE Paper 2002-01-2218.
3. "Emission measurements on a diesel car, UVMV Prague (owned by German TÜV), Sept 2001".
4. "Emission measurements on a Volvo bus engine, by STT Emtec, Sundsvall, Sweden, April 2001".
5. "Evaluating a Fischer-Tropsch Fuel, Eco-Par, in a Valmet diesel Engine", K. Nord and D. Haupt, Luleå University of Technology, SAE Paper 2002-01-2726.
6. "Influence of fuel on diesel-emissions engines", SMP Svensk Maskinprovning AB and SP Statens Provnings- och Forskningsinstitut, Report PU 45850/02 and PU 40318/01. (<http://www.smp.nu>)
7. "Evaluation of effects of three diesel fuels on embryonal development of Zebra fish, (Danio Rerio)", Tomas Viktor, IVL report U901, in Swedish.

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