

UECC Advisory note on fuel amount and type according to regional conditions and unit logistics.

To ensure vehicles do not suffer fuel shortages during the logistics movement it is recommended that a minimum level of relevant fuel type is provided at the factory

Vehicle Type	Engine up to 2.0L	Engine above 2.0L
	Fuel min. Liters	Fuel min. Liters
Passenger car	9	12
SUV/4x4	12	15
Small truck	15	20
Truck		25

It is also recommended that for diesel fuelled vehicles affected by cold climate conditions manufacturers seasonally schedule the use of the appropriate diesel type to prevent fuel gelling problems encountered when vehicles destined for North Europe, Scandinavia and Russia are fuelled with regular diesel.

Petrol fuelled vehicles are not affected.

Cold climate reference for Diesel fuels are shown below :

CFPP -Cold filter plugging point - this test gives an estimate for the lowest temperature that a fuel will give trouble free flow in fuel systems.

Winter diesel

For the "temperate" climatic zones, the EN 590 standard defines six classes from A to F.

In Central and Western Europe, the winter **diesel must meet Class F** conditions at least from the beginning of December to the end of February. During a transitional period (mostly October and April), a lower class must be met.

	Class A	Class B	Class C	Class D	Class E	Class F
CFPP value	+5 °C	0 °C	-5 °C	-10 °C	-15 °C	-20 °C
CloudPoint	(not specified in EN 590)					

Arctic diesel

For the "arctic" climatic zones, the EN 590 standard defines five classes from 0 to 4. In the Scandinavian countries, the winter diesel **must meet Class 2 conditions**.

	Class 0	Class 1	Class 2	Class 3	Class 4
CFPP value	-20 °C	-26 °C	-32 °C	-38 °C	-44 °C
CloudPoint	-10 °C	-16 °C	-22 °C	-28 °C	-34 °C

The below selection of tables indicate the time frames when a change-over of diesel grade to winter or arctic diesel fuel is made by country.

Finland / Russia

period	CFPP value	time frame
summer period	-5 °C	01.04. - 31.10.
winter period	-26 °C	01.11. - 31.03.

Norway

Classification	CFPP value	time frame
minimum	-11 °C	01.04 - 15.09.
winter diesel	-24 °C	16.09. - 30.11.
arctic diesel	-32 °C	01.12. - 28.02.
winter diesel	-24 °C	01.03. - 30.03.

Germany

Designation	CFPP value	time frame
Sommerdiesel	0 °C	15.04 - 30.09.
Übergangszeit	-10 °C	01.10. - 15.11.
Winterdiesel	-20 °C	16.11. - 28.02.
Übergangszeit	-10 °C	01.03. - 14.04.

Poland

period	CFPP value	time frame
transitional	-10 °C	01.10. - 15.11.
winter times	-20 °C	16.11. - 28.02.
transitional	-10 °C	01.03. - 15.04.

Whilst manufacturers will have set levels of fuel programmed into production consideration should be given to changing to fuels that have the relevant winter/arctic properties for entering colder climates and to providing additional fuel to units known to have Transhipment logistics.

An introduction time scale for diesel grade changeover is suggested. Where Transhipment activity is planned an additional 3 liters of fuel should ideally be added to factory minimum. This will prevent intermediate refueling and reduce operational delays and increased damage risks associated with non-starter units.

To highlight the impact of fuel problems, during 2012 UECC have encountered re fuelling and re starting actions for lots of several hundred units on a number of occasions.

For any further questions regarding these matters, please contact UECC Customer Service at cs.oslo@uecc.com or Richard Russon at rru@uecc.com