

TECH TIPS

#2008

COACH MODEL: Van Hool coaches with DEF

DATE: 01 Sep 2020

SUBJECT: DEF storage

Diesel Exhaust Fluid (DEF) has been required for the 2011 MY and forward diesel vehicles to meet 2010 EPA emission regulations. DEF is a non-hazardous clear fluid (66.5% deionized water / 32.5% chemically pure Urea) that is injected into the diesel exhaust system to reduce NOx emissions.

DEF INVENTORY STORAGE LEVELS

- If a climate-controlled facility is available, for maximum shelf life, store between 68°F (20°C) and 23°F (-5°C).
- Store DEF out of direct sunlight. If DEF is stored outside, it must be shaded from the sun.
- Store DEF below 86 degrees.
- Shelf life should be based on the period past the date code on the bottle. The date code is formatted as MMDDYY (i.e. 022817 = February 28, 2017).

The table below shows shelf life for DEF continuously exposed to these temperatures for the entire period. Cycles where the maximum daily temperature is similar to what is shown below, will have longer shelf life than shown.

DEF Shelf Life versus Temperature	
Constant Ambient Storage	Shelf Life
Temperature	In Months
≤50 °F (10°C)	36
<77 °F (25°C)	18
	10
≤86 °F (30°C)	12
405 °F (05°O)	0
≤95 °F (35°C)	6
<104°E (40°C)	2
≤104°F (40°C)	2

Example a coach that has been in storage for 6 month with the same DEF fluid in the tank. Most summer temperatures are 90 degrees or more. Its very likely that the DEF is no longer viable and will need to be replaced. Due to Urea degrading. If this is not addressed engine fault codes and possibile coach shut down will follow.