

STORAGE AND HANDLING OF DIESEL EXHAUST FLUID (DEF)



DO'S

- **DO use API-certified DEF products which have been certified to meet ISO/OEM requirements and are tested in the aftermarket to assure compliance.**
- DO maintain ideal storage conditions. High temperatures can reduce shelf life (See INSET*).
- DO rotate stock regularly. Use older stock first.
- DO use dedicated bulk storage tanks for DEF.
- DO thoroughly rinse the tank with distilled or de-ionized water or on-spec DEF when switching tanks with another product is unavoidable.
- DO monitor DEF levels in cold weather. DEF can expand by up to 7% when frozen.
- DO ensure your supplier is providing a Certificate of Analysis (or Quality) with every shipment that addresses all of the quality characteristics that ISO 22241 requires.
- DO consider a closed-loop system for DEF transfer to minimize the risk of contamination from airborne particles.
- DO employ dedicated dispensing equipment for DEF. Avoid using common funnels, pitchers or hoses used for other fluids to prevent contamination.
- DO clean dispensing equipment properly with distilled or de-ionized water for cleaning, followed by a rinse with DEF.

DON'TS

- DON'T store DEF in direct sunlight or high temperatures, which can accelerate degradation.
- DON'T add aftermarket additives to DEF. These may harm the quality of your DEF and could void your warranty.
- DON'T use dirty equipment to dispense DEF. This can introduce contaminants and affect performance.
- DON'T reuse containers of other products for DEF without thorough cleaning. Cross-contamination can affect DEF quality.
- DON'T use tap water to clean your tanks and dispensing equipment. Tap water can contain contaminants that are harmful to SCR systems.
- DON'T forget to periodically use/replace any "emergency" DEF you carry in your diesel in accordance with the storage guidelines (See INSET*).

*Storage Temperature Impact on DEF Shelf Life

Constant Ambient Storage Temperature	Shelf Life, months
≤50 °F (10 °C)	36
≤77 °F (25 °C)	18
≤86 °F (30 °C)	12
≤95 °F (35 °C)	6
>95 °F (35 °C)	Test before use

Look for the API DEF certification mark and confirm licensed products by searching the API DEF Licensee Directory at www.API.org/DEF

API strives to promote best practices in storing and handling DEF to ensure safety, efficiency and compliance with the ISO 22241 specification. For more information, contact APIDEF@api.org.



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