

DEF SHELF LIFE

UNDERSTANDING DEF SHELF LIFE AND TEMPERATURE SENSITIVITY

WHAT EXACTLY IS DEF?

Diesel Exhaust Fluid (DEF) is a blend of 32.5% urea and 67.5% de-ionized water produced to an international standard (ISO 22241). DEF is used to reduce the nitrogen oxide concentration in diesel exhaust emissions from diesel engines. Although non-hazardous, DEF is corrosive for some metals and should be stored in containers made of appropriate material.

HOW SHOULD DEF INVENTORY BE STORED?

Typical shelf life of Diesel Exhaust Fluid (DEF) is 2 years. However, to maximize shelf life it's recommended to store between 68°F and 23°F (20°C and -5°C). Several factors can play a role in reducing overall shelf life, so be sure to follow the recommendations below:

- If storing DEF outside, it must be out of direct sunlight and shaded. If kept in direct sunlight for sustained periods, it will begin to lose its urea potency.
- DEF should be stored below 86°F or in the coolest area of your storage facility.
- If storing DEF in a climate breaching an average of 95°F, manage your inventory accordingly and keep it to a minimum.
- DEF will freeze into a crystalline slush at 12°F (-11°C). Do not store DEF in outside climates where temperature fall below 23°F (-5°C), unless your inventory container is “winter-friendly.”
- If stored at higher temperatures for a prolonged period of time, DEF can evaporate because it is 67.5% water. To avoid the risk of evaporation, be sure to keep the DEF tank and storage containers securely closed.

The table shown below gives a representation of the shelf life of Diesel Exhaust Fluid (DEF) continuously exposed to temperatures ranging from 68°F to 23°F for the entire time period. Keep in mind shelf life for DEF inventory should always be based on the average daily temperature, not necessarily the day's maximum temperature.

DIESEL EXHAUST FLUID SHELF LIFE V. TEMPERATURE

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
<104°F (40°C)	2

GO WITH THE FLOW.



WHAT DEF EQUIPMENT OPTIONS ARE AVAILABLE?

It's important to remember that Diesel Exhaust Fluid (DEF) is corrosive for some metals such as carbon steel, aluminum, copper, and zinc. DEF should never be stored in containers made of these materials. Any equipment or component that will come into contact with DEF should be made of stainless steel or high-grade polyethylene. TECALEMIT offers an array of equipment solutions to be used specifically for DEF.



DID YOU KNOW?

In our Product Catalog, all Diesel Exhaust Fluid (DEF) compatible equipment solutions are marked by a blue box and white "U" that represents "Urea." This makes DEF compatible products easy to locate.



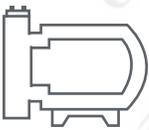
FLOW METERS



FMOG - Pulsar Model



FMT 3



PUMPS



HORNET W85 H INOX



Poly Piston Hand Pump



Air Operated Pump



INVENTORY MANAGEMENT



Wonderbox



Superbox



HDM eco DEF

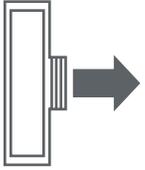


M1 Pro System



WM Pro System

GO WITH THE FLOW.



BULK TRANSFER



DEF PRO-5000



DEF PRO-6000



Truck Belly Box



DEF ALL IN ONE



All In One - Southern



All In One - eco



All In One - Northern



BlueMaster® Island-Friendly Tank

CONTACT US TODAY

Here at TECALEMIT, everything we do is customer-driven. We take your everyday issues and find innovative, cost-effective solutions. Contact us today with further questions about Diesel Exhaust Fluid (DEF), our line of DEF specific equipment solutions, or to discuss existing or new projects you have.

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