

What is DEF/AdBlue® ?

- (Diesel Exhaust Fluid (DEF) is a precisely mixed solution of urea and de-ionized water that is injected into exhaust systems to reduce NOx emissions in diesel engines
- DEF solution purity requirements are defined by the International Organization for Standardization (ISO) standard 22241-1, and are met by many brands names, including those that carry AdBlue® or API certifications
- (DEF) is commonly called Adblue® in Europe

Is DEF corrosive?

- DEF is not toxic, harmful or dangerous – however, it is corrosive to many different materials, including copper, brass, aluminum and carbon steel
- Failure to use DEF-compatible materials may result in corrosion and/or contamination
- Small DEF spills can be washed away with water or wiped up (for large spills, contact your DEF supplier for advice)

Does DEF freeze?

- DEF does freeze at 12°F (-11°C)
- Onboard DEF systems are designed to provide heating to thaw DEF for use in cold weather
- Freezing and thawing will not degrade DEF

Are there storage requirements?

- DEF should be stored in a dry, well-ventilated area between 15°F and 77°F (-9°C and 25°C)
- Storage tanks should not be exposed to direct sunlight for long periods of time, as urea will decompose
- Please refer to ISO 22241-3 for further information regarding DEF handling, transportation and storage

Are there recommendations for dispensing?

- To prevent contamination, fill area should be cleaned prior to removing tank cap
- Standard nozzles provide safeguards for DEF dispensing and are smaller in diameter than a diesel nozzle (preventing diesel nozzles from being inserted into DEF fill ports)
- Wearing protective clothing is not necessary, however, DEF can stain clothes

Is contamination a concern?

- DEF cleanliness is extremely important as contaminants can degrade DEF
- To avoid contamination, only use transfer containers that are dedicated to DEF
- Poor handling practices can lead to emission systems failures