

General DEF Guide



Definition

A specific composition of urea for application in transportation to reduce the amount of nitrogen oxides (NOx) emitted into the air by diesel engines. DEF is a high purity chemical, comprised of 32.5% urea and 67.5% de-ionized water.

Package Sizes

2.5 Gallon Jug

55 Gallon Drum

330 Gallon Tote

Mini-Bulk (< 4,000 Gals)

Bulk (> 4,000 Gals)



*Brenntag recommends the use of closed systems for drums and totes

EPA Mandate

Diesel Exhaust Fluid is produced to an international standard (ISO 22241). In order to meet the 2010 EPA Diesel Emission Standards to reduce the amount of NOx emitted by diesel engines, several engine manufactures employed Selective Catalytic Reduction (SCR) as an after-treatment technology combined with Exhaust Gas Recirculation (EGR).

As explained by the American Trucking Association (ATA), "To reduce NOx, a small amount of DEF is injected directly into the exhaust upstream of a catalyst. The DEF vaporizes and decomposes to form ammonia (NH₃), which in conjunction with the SCR catalyst, reacts with NOx to convert the pollutant into nitrogen (N₂) and water (H₂O)."

DEF Markets - Tier Integration

On-Highway (2010), Off-Highway (2014), Rail (2015) and Marine (2016)