

# CHEMBLU32

MANUFACTURED IN WESTERN CANADA

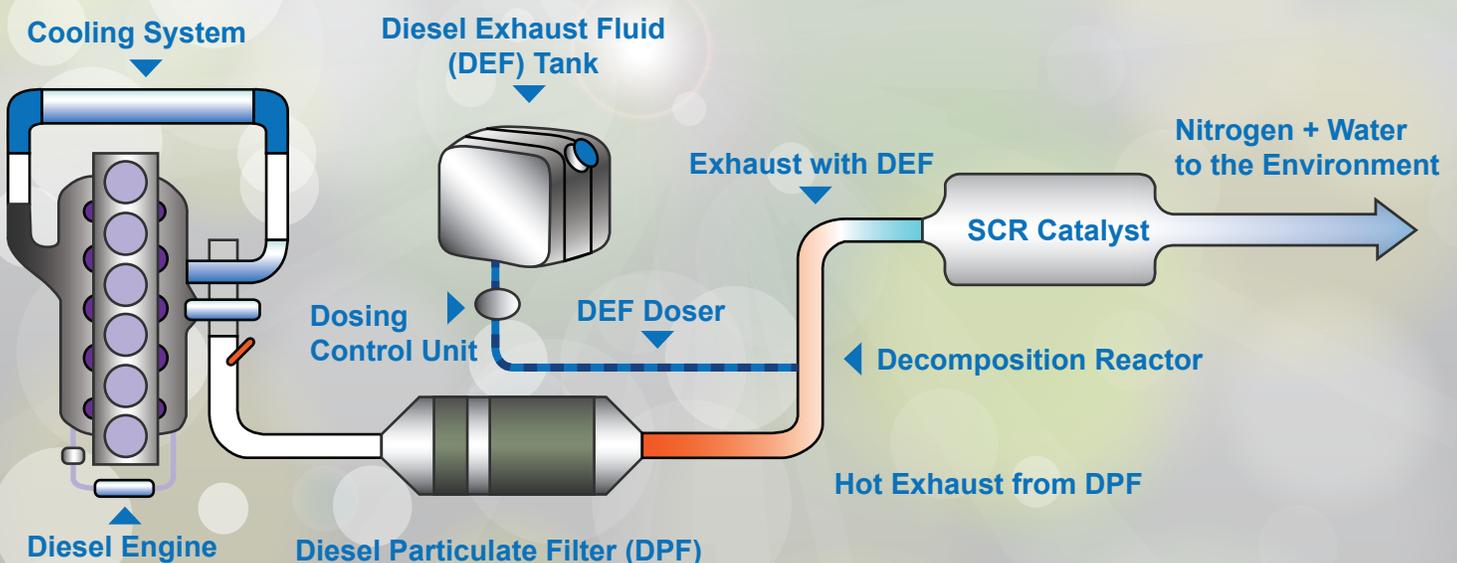
## DIESEL EXHAUST FLUID (DEF) IMPROVES THE AIR WE BREATHE!

Since 2010, most leading diesel engine manufacturers have chosen to meet the US and Canadian Environmental Protection Act (EPA) emission standards through the use of Selective Catalytic Reduction systems (SCR). SCR systems require the use of DEF.

Moving forward, all types of diesel powered equipment will require SCR technology including farm equipment, mining equipment, diesel powered generators and marine vessels to name a few. In commercial trucking alone, DEF use reduces emissions to near zero while delivering fuel savings at the same time. This distinguishes the SCR technology as not only being good for the environment, but good for business too!

SCR technology is designed to reduce NO<sub>x</sub> emissions by up to 90%, hydrocarbons (HC) and carbon monoxide (CO) emissions by 50-90%, and particulate matter (PM) emissions by 30-50%.

SCR uses DEF to reduce the NO<sub>x</sub> emissions that are produced by the engine during combustion. A liquid spray of DEF is applied to the exhaust stream which starts a reaction that produces ammonia gas (NH<sub>3</sub>). The resulting gas passes through the catalytic converter where it is converted (through the use of a catalyst) to harmless Nitrogen (N<sub>2</sub> – 82% of the air we breathe) and water (H<sub>2</sub>O).



Chemisphere's CHEMBLU32 DEF is certified by the American Petroleum Institute (API) to meet the stringent product quality specifications of the ISO 22241 standard for its use in NO<sub>x</sub> abatement. This ensures that you are getting a Diesel Exhaust Fluid which is stable, non-toxic and a completely safe solution.

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## STORAGE AND HANDLING CONSIDERATIONS

### Storage

Storing DEF for extended periods of time is not recommended. Optimal storage temperatures for DEF are between -5°C and 25°C and DEF will solidify at temperatures below -11°C. Should your material freeze, allow it to thaw and continue to use the material on hand. If the material is frozen and thawed, it retains its performance integrity. Prolonged exposure to high temperatures or sunlight will decrease the shelf life of the product and may affect its performance. It is recommended that all DEF be used within one year of manufacture.

### Handling

Handling systems are available which are made specifically to transfer DEF. They are made of DEF compatible materials which include many grades of stainless steel, Titanium, Polypropylene (free of additives), Polyethylene (free of additives), PFA, PFE, PVDF, and PTFE (all free of additives).

A complete list of compatible materials is available from your distributor.

Materials to avoid in the handling of DEF include: carbon steel, nonferrous metal alloys (copper, zinc, lead). Also avoid Aluminum, Magnesium and their alloys and avoid solders containing lead, silver, zinc or copper. Do not use plastics coated with nickel or other metals.

### Proper Use of CHEMBLU32

- *Keep DEF in a sealed container at all times*
- *Avoid exposure to dust and dirt*
- *Never refill a used container with DEF*
- *Never mix DEF with diesel fuel*
- *Never dilute DEF with any substance*
- *Use dedicated DEF equipment for handling and dispensing*

Failure to follow proper use guidelines could result in SCR failure.

### Packaging Sizes Available:

- 10 Litre Jugs (2/case)
- 208 Litre Drums
- 1040 Litre Totes



*Bulk Deliveries are also available*



ChemiSphere Solutions is a member of the Chemical Association of Chemical Distributors



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