TECHNICAL BULLETIN

FQE® LEL-V Eco

Patented product for cost-effective hard surface cleaning and hydrocarbon vapor absorption

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Standard Package
55 US gallons (208 litre) closed head poly drum, tote bin, or bulk.

Cleaning Benefits
› Exceptional surface cleaning
› Improves oil recovery
› Effective on paraffinic and asphaltenic crudes
› Reduces the need for mechanical cleaning
› Effective in reducing LEL readings in degassing operations

FQE® LEL-V Eco is both a low-HLB surfactant and a powerful solvent designed to be a safe, non-petroleum based agent for use in degassing tanks, towers and other vessels while exhibiting exceptional degreasing performance.

It contains no SARA 313, DOT Hazmat Table 172.101, California Proposition 65 or CERCLA reportable materials.

Application
FQE LEL-V Eco can be applied by steam phase injection, spray method, vat soaking and cascading. Concentrations of 3-5% aqueous solution are typical.

A sufficient volume of treating liquid should be made to allow for a continuous circulation to be established. Depending upon the nature of the deposits, the product should be circulated for 6 to 18 hours at temperatures of 65 - 93°C (150 - 200°F). Following the circulation of the product for the prescribed time, the effluent should be sent to a holding tank where phase separation of the removed oils can occur. A water rinse of the vessel following treatment is recommended.

Dilution
The dilution and rate of application will vary with the severity and nature of the hydrocarbon deposits present. Typical is 3% to 5% in water. Circulation rates should be as high as attainable with the available equipment (>100 gpm is recommended). For steam phase injection, 0.25 - 0.50% based on the steam flow is typical.

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Notes:
1. Unleaded gasoline vapor as LEL source
2. Two second application of product followed by 30 second settling time in between spray cycles. 3% aqueous solutions of chemical products at ambient temperature 24°C (75°F)
3. MSA 4X gas meter, calibrated with CH4. Starting LEL point at 100%

Safety
› No hazardous materials
› HMIS rated zero in all categories
› NFPA rated zero in all categories
› Suppresses ignition of hydrocarbons
› Near neutral pH (8.0 – 8.5)
› No volatile organic compounds (VOC’s)
› No flash point
› No caustics
› Completely water soluble

Environmental
› Will not harm nitrifying bacteria
› Biodegradable
› Reduces water consumption
› Wash water suitable for waste water treatment
› Reduces hazardous waste