



# *Macro-Pur*<sup>®</sup>

## *T-45 BD MP*

### **CATALYST FOR BIODIESEL APPLICATIONS**

Macro-Pur *T-45 BD MP* is a premium grade, solid acid catalyst based on a cross-linked polystyrene matrix containing sulfonic acid groups. Tulsion *T-45 BD MP* is manufactured using controlled particle size synthesis and is used for many process applications.

The first step in biodiesel production involves esterification of fatty acids and trans-esterification of triglycerides, commonly found in raw oil feedstocks. This process yields a fatty-acid-methyl-ester or “biodiesel” component in the hydrophobic phase and a glycerine component in a hydrophilic phase.

In the purification step, Tulsion *T-45 BD MP* is used to remove trace levels of glycerine and soaps from the biodiesel exhibiting high conversions with excellent physical, chemical stability and operating characteristics. *T-45 BD MP* can be used in a wide range of temperature and pH conditions.

## TYPICAL CHARACTERISTICS

Type	:	Strong acid cation exchange resin, Macroporous
Matrix Structure	:	Cross linked polystyrene
Functional group	:	Sulfonic acid
Physical form	:	DRY spherical beads
Ionic form	:	Hydrogen
Particle Size	:	0.4- 1.2 mm
Screen Size U.S.S(wet)	:	16-40
Particle size, Uniformity Coefficient	:	1.5 max
Moisture content (approx.) %	:	< 3 %
Effective Size	:	500 – 600 microns
Operating pH range	:	0-14
Solubility	:	Insoluble in all common solvents
Oligomer	:	50 ppm max

## PACKING

Super sacks	35 ft <sup>3</sup>
Fiber Drums	7 ft <sup>3</sup>
Polythene lined bags	1 ft <sup>3</sup>



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**THERMAX**  
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