PROCESS TECHNOLOGY OF OLIGO ETHER ACRYLATE (Military Grade)

OLIGO ETHER ACRYLATE [Dimethacrylate-bis(triethylene glycol) phthalate] is used in single base propellants as a moderant to control the burning rate of propellants. In addition, it is also used as binder in production of reinforced plastics, protective coatings, construction materials, electric insulation compounds, lacquer, special pastes etc. The material has poor shelf-life thus it mandates indigenous development. Further, the synthesis of oligo ether acrylate involves typical reaction conditions.

Considering the important and necessity, HEMRL has developed a synthesis process which can be scaled-up for the large scale preparation.

Process of oligo ether acrylate has been established at 100g/batch. The intermediate and final products have been well characterized. Synthesis involves two step processes and is sensitive to various reaction parameters. After rigorous studies, the optimal process conditions have been optimized.

OLIGO ETHER ACRYLATE