



# EFFICIENT DISTILLATION OF HAZARDOUS MATERIAL

## FINE CHEMICALS

### THE PROBLEM

The batch distillation was used for the removal of impurities, required product purity to 92%. The conventional technology resulted in the 60% product purity.

### SOLUTION BY FABEX

The challenge was to distillate the hazardous product, reactive to the air. The challenge has been encountered by using the Agitated Thin Film Evaporator- Vertical (ATFE-V). The agitated thin film result in the new surface generation which result in the improved evaporation rate. The numerous trials were done on pilot plant to optimize the parameters. The conventional process obtained the 60% product purity which was far below the required purity i.e., 92%. The ATFE improved the purity to 93% and reduced the operation time.

### ACHIEVEMENTS

- Increased efficiency to 93%
- Safer operation & handling
- Higher output in less volume
- 2 to 1 step in single equipment
- Reduction in time, cost & energy
- Reduction in manual work

**AGITATED THIN  
FILM EVAPORATOR  
(ATFE)**