**Analysis of impurities in crude benzotriazole**

Benzotriazole is a corrosion inhibitor for copper, high copper alloys, silver, cobalt, aluminum, and zinc. Benzotriazole protects metals from corrosion in air. Benzotriazole protects copper and brass stock during shipment and storage and between processing steps. Impurities in crude benzotriazole were measured using HPLC with the silica-C18 column Finepak SIL C18S by gradient elution method using H2O and CH3OH as mobile phase.

**Conditions:**
- **Pump:** PU-980
- **Detector:** UV-970
- **Wavelength:** 275nm
- **Sensitivity:** 0.16 AUFS
- **Column:** Finepak SIL C18S
- **Eluent:**
  - A: H2O
  - B: CH3OH
- A/B 25 min 15 min
  - (80/20)---------(0/100)---------(0/100)---------Initial
  - Linear Hold
- **Flow rate:** 1.0 ml/min
- **Temperature:** 40 degree celsius
- **Sample:** Crude benzotriazole

![Benzotriazole Structure](image)

**Fig. 1**