

# **HAZM 400**

# **TURBO-KLEEN**

# PRODUCT DATA SHEET

#### PRODUCT DESCRIPTION

**HAZM 400** is a water based, concentrated, biodegradable, liquid cleaner which has proved effective in the removal of oil, salt and solid deposits from compressor blades, guide vanes, and rotors of industrial, marine and aviation gas turbine engines. Periodic cleaning of these components is necessary to avoid power loss and abnormal temperature increases.

#### TYPICAL PHYSICAL PROPERTIES

**HAZM 400** meets the following specifications:

- U.S. Military Specification MIL PRF 85704.
- Solarturbines Specification ES 9 62.

## PRODUCT APPLICATION DETAILS

## 1) For On-Line Cleaning:

On-line cleaning with **HAZM 400** is normally carried out by mixing 1 part of HAZAM 400 concentrate with up to 4 parts of demineralized, distilled or deionized water into a stable solution.

The volume of chemical solution needed per wash and frequency of use depends on engine size, severity of fouling and operating environment. Detailed user instructions and recommendations are provided in the Saudi CHEM manual and by our technical staff.

Two typical procedures for cleaning are given in our bulletin for in-place cleaning Gas Turbine Compressors.

### 2) For Off-Line, Crank Washing.

Off-line cleaning with K-330 is normally carried out by mixing 1 part of **HAZM 400** with up to 4 parts distilled, demineralized or deionized water. The solution is injected at cranking speed, allowed to soak for 20 to 60 minutes and then thoroughly rinsed off at cranking speed with distilled or acceptable good quality water.

Volume of cleaning solution per wash and washing frequencies should be as per the normal washing routine of the operator or as recommended by the engine manufacturer.

#### PRODUCT PACKAGING DETAILS

30 and 200 Liters