

### MILITARY / COMMERCIAL AVIATION



**Penair M5704A** is a gas turbine engine cleaner specifically designed to improve the performance of aircraft turbine engines. Used at a 1:4 dilution ratio with fresh water, **Penair M5704A** forms a micro-emulsion which provides fast removal of accumulated dirt, oil residues and salt deposits from interior gas path surfaces. Rinsing with water after application leaves the gas path free of soils and protects turbine engines against sulfidation attack. **Penair M5704A** has been tested on titanium, brass, copper, magnesium, aluminum, sermetel W, steel and stainless steel without harmful side effects. It is safe for polymeric materials, such as silicone elastomers, epoxy adhesives and acrylic plastics when used as intended and as specified in MIL-PRF-85704C Type I.

### FEATURES AND BENEFITS

- Micro emulsion
- Water dilutable
- Restores engine power
- Reduces operating EGT
- Improves fuel economy
- Reduces sulfidation
- Non-corrosive to jet engines
- Prolongs engine life

#### Use procedure

- 1) Disconnect and cap required lines and fittings.
- 2) Fill a corrosion control cart with 5 gallons of **Penair M5704A** and 20 gallons of water. Mix.
- 3) Connect corrosion control cart to a 100 psi air source (charged nitrogen bottles may be used).
- 4) Motor the engine for 30 seconds while simultaneously spraying cleaning mixture into the compressor. Allow engine to coast to a complete stop. Repeat Step 3 until mixture is consumed.
- 5) Allow 10 minutes soak time before rinsing.
- 6) Add fresh water to the corrosion control cart. Windmill and rinse engine until water out of exhaust is clear.
- 7) After rinsing, windmill engine to blow excess solution from engine and dry.
- 8) Start engine and reconnect lines and fittings.

# PENAIR® M5704A

## TURBINE ENGINE GAS PATH CLEANER

### PHYSICAL PROPERTIES

Appearance	Clear amber liquid
Odor	Mild solvent
pH	About 9
Freezing Point	About 30°F
Boiling Point	About 212°F
Flash Point (TCC)	145°F, 180°F COC
Relative Density	0.95
Auto-Ignition Temperature	Not determined
Water Solubility	Emulsifies
Viscosity	15-22 cSt at 80°F

INCOMPATIBILITY
Strong oxidizing agents.

WAREHOUSING PRECAUTIONS
Store in a well-ventilated place. Keep container tightly closed. Store locked up. Do not store near heat, sparks, open flame, or other ignition sources. Do not store in direct sunlight. Avoid storing above 120°F (49°C).

AVAILABLE SIZES
5 gallon Pail
55 gallon Drum

APPROVALS
MIL-PRF-85704C Type I
Solar Turbines ES-9-62/9-62-1
Pratt & Whitney SPMC 87-7/P&W Canada

### FIRST AID MEASURES

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists or develops: Get medical advice or attention. Penetone recommends that after any eye exposure a physician be seen immediately.

**Ingestion**

**If swallowed:** Immediately call a poison center, doctor, physician or other competent medical authority. Rinse mouth. Product presents an aspiration hazard. **DO NOT INDUCE VOMITING.**

**If inhaled:** Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, physician or other competent medical authority if you feel unwell.

**If on skin (or hair):** Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used to wash skin. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice or attention.

### PERSONAL PROTECTION Security equipment



WHMIS



**IMPORTANT:** Before using **PENAIR M5704A**, always be sure to read and follow precautions and directions for use appearing on the product container label and on the safety data sheet (S.D.S).



#### CLIFTON

125 Kingsland Avenue  
Clifton, NJ 07014  
Tel.: 201-567-3000  
Toll free: 1-800-631-1652

#### MONTREAL

10,900 Secant Street  
Anjou, QC H1J 1S5  
Tel.: 514-355-4660  
Toll free: 1-800-361-8927

#### EDMONTON

11411-160 Street  
Edmonton, Alberta T5M 3T7  
Tel.: 780-454-3919  
Toll free: 1-866-454-3919

United States  
[www.penetone.com](http://www.penetone.com)

Canada  
[www.westpenetone.com](http://www.westpenetone.com)