

PENAIR® M5704A

Turbine Engine Gas Path Cleaner

- **Penair M704A** 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, it 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 M704A** 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.



Use procedure

1. Disconnect and cap required lines and fittings
2. Fill a corrosion control cart with 5 gallons of Penair M704A 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 chart. Windmill and rinse engine until water out of the exhaust is clear.
7. After rinsing, windmill engine to blow excess solution from engine and dry,
8. Start engine and reconnect lines and fittings.

Features and Benefits

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

Available Sizes

- 5 gallon pail
- 55 gallon drum

Approvals

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

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).

Personal Protection/Security Equipment



WHMIS



First Aid Measures

If in the 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. Chemisphere recommends that after any eye exposure a physician be seen immediately.

If swallowed: Immediately call a poison center, doctor, physician or other competent medical authority. Rinse mouth. Product presents an aspiration hazard.

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): Wash with plenty of water or mild soap. Take off immediately all contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice or attention.

IMPORTANT: Before using PENAIR® M704A, always be sure to read and follow precautions and directions for use appearing on the product container label and the safety data sheet (S.D.S.)