



ROCHEM
TECHNICAL SERVICES
Established in 1978

FYREWASH® F4

Efficient Gas Turbine Compressor Cleaning

HIGHLY BIO-DEGRADABLE WATER BASED DETERGENT FOR ONLINE & OFFLINE COMPRESSOR WASHING

PRODUCT DESCRIPTION

FYREWASH® F4 was developed to give the maximum possible cleaning efficiency and effectiveness from a non-solvent chemical.

Rochems R&D department have developed this product using state of the art technology, resulting in a non-hazardous, user-friendly and biodegradable water-based cleaner.

FYREWASH® F4 sets the standard against which the performance and cost-effectiveness of all other true non-solvent water based gas turbine cleaners can be judged.

FYREWASH® F4 is a highly biodegradable product, according to OECD 301-A test and has no cloud point for complete temperature stability throughout the compressor.

FYREWASH® F4 meets all major OEM's specification requirements world-wide and have a high temperature stability.

APPLICATION

FYREWASH® F4 can be used with any on-line/off-line injection system but for optimum cleaning results and economic usage of chemicals, Rochem offers a full range of patented manual or fully automatic atomising injection systems to suit any engine type.

ON-LINE CLEANING

Is normally performed by mixing one part FYREWASH® F4 concentrate with four (4) parts of water into a stable solution. Use demineralised water as specified by the engine manufacturer, typically <math><11\mu\text{S}/\text{cm}</math>. The volume of chemical solution needed per wash and the optimum cleaning frequency will depend upon engine size, operating environment and fouling tendency. It is recommended that a post rinse is performed to ensure that the nozzle system is cleaned and ready for next operation.

OFF-LINE, CRANK WASHING

Concentrated FYREWASH® F4 is normally mixed with four (4) parts of good quality water. FYREWASH F4-Super Concentrate is to be mixed in a 1:19 dilution. The solution is injected at cranking speed, allowed to soak for 20 to 30 minutes then thoroughly rinsed off at cranking speed with good quality water acceptable to the engine manufacturer. FYREWASH® F4 can be used without dilution for offline cleaning, providing a superb cleaning result for heavily fouled compressors.

ANTIFREEZE

Add antifreeze below +10°C, FYREWASH® F4 is compatible with Methanol, Propylene Glycol, Ethylene Glycol. Rochem manufacture a superior freeze point depressant, Rochem FPD, please contact local office for further information.

FEATURES and BENEFITS

- Safely and effectively cleans compressors on-line when running at any speed and load.
- Extremely effective non-solvent cleaner.
- Meets the most stringent requirements of gas turbine manufacturers.
- No cloud point
- Ideal for light and frequent on-line washing of any type of industrial, marine or aviation gas turbine to maintain in-service output and fuel efficiency.
- On-line cleaning reduces damaging shutdown/start-up thermal cycles and starter wear and tear.
- Ideal for off-line cleaning due to high biodegradability.
- Non-flammable.
- Mixes readily with most antifreeze agents to allow low ambient temperature on-line/off-line cleaning.
- Supplied in concentrated form to reduce transport and handling costs and minimise storage requirements.
- Worldwide product support.
- Backed by Rochem's unique high value product liability insurance.

MANAGEMENT SYSTEM

Tariff code 34029090 Europe

QUALITY MANAGEMENT SYSTEM

ISO 9001:2008

ENVIRONMENTAL MANAGEMENT SYSTEM

ISO14001: 2004

PACKAGING

25 lt (6.5 USG) pails, 210 lt (55 USG) drums & 1000 lt International Bulk Container (IBC)

SHIPPING

No restrictions. Classified as non-hazardous for international transport by road, sea and air

STORAGE

Store in a cool, dry place in tightly closed receptacles

SHELF LIFE

5 years



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SAFETY AND HANDLING

HAZARDS	EC Hazard rating: Xi. Irritant US NFPA rating: 1, 1, 0
PROTECTIVE MEASURES	Non-hazardous but avoid frequent prolonged direct contact with skin to prevent possibility of de-oiling skin and wear eye protection as a matter of course when handling any chemical.
SPILLAGE	Absorb large spillages with sand or earth. Flush away small spillages with water.
FIRE	Use foam, carbon dioxide, dry chemicals, sand or earth.

FIRST AID

EYES	Flush liberally with water. If any irritation persists seek medical attention.
SKIN	Wash skin with soap and water.
INHALATION	Remove patient to fresh air. If rapid recovery does not occur obtain medical attention.

TYPICAL PROPERTIES

APPEARANCE	Amber coloured clear liquid
FLASH POINT	No flash point
DENSITY	
In g/ml at 20°C:	FYREWASH® F4: 1.02
pH (20% solution) FYREWASH® F4:	7.0 - 8.0

Please contact your nearest Rochem office for full information on this or any other on-line or off-line compressor washing procedure.

IMPORTANT ECOLOGICAL NOTES

FYREWASH® F4 is a safe and highly biodegradable chemical. However, for off-line, crank-wash cleaning all chemical solution and rinse water drainage should be collected and disposed of properly no matter what type of chemical (Solvent based or detergent based) is being used.

Always adhere to the local & national regulations.

Rochem or any associated or subsidiary company's warranties of fitness and merchantability, if any, as well as any express warranties regarding the use of this product shall not be effective or actionable unless the goods are used as directed herein and in no other manner due to potential hazards from improper use of the goods described herein.

Product might vary slightly depending on country of origin

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Certificate No: AJA08/12780

ISO9001:2008 AJA Accreditation attained by
RTS-Europe – Manufacturers of equipment



ISO9001:2008
Cert. No. AQA665377



ISO14001:2004
Cert. No. RQA665378

ISO9001:2008 and ISO14001:2004 Lloyds Accreditation
attained by ROMACO – Manufacturers of Fyrewash Chemicals



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