



FYREWASH® F2

Efficient Gas Turbine Compressor Cleaning

A WATER BASED CLEANER CONTAINING A RENEWABLE SOLVENT FOR ON-LINE AND OFF-LINE COMPRESSOR CLEANING

PRODUCT DESCRIPTION

FYREWASH® F2 was developed to give the maximum possible cleaning efficiency and effectiveness from a natural-solvent chemical.

The pine oil solvent & ultra-pure surfactants used in the FYREWASH® F2 formula make it a very safe & user friendly product for both online & offline compressor cleaning.

Approved & meets most major OEMs world-wide.

APPLICATION

FYREWASH® F2 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® F2 concentrate with four (4) parts of water into a stable solution. Use demineralised water as specified by the engine manufacturer, typically $<11 \mu\text{S}/\text{cm}$. 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® F2 is normally mixed with four (4) parts of good quality water. 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® F2 can be used without dilution for offline cleaning, providing a superb cleaning result for heavily fouled compressors.

ANTIFREEZE

Add antifreeze below $+10^{\circ}\text{C}$, FYREWASH® F2 is compatible with Methanol, Propylene Glycol, Ethylene Glycol. Rochem manufacture a superior freeze point depressant, Rochem FPD, please contact Rochem 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.
- 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 340290900 Europe

QUALITY MANAGEMENT SYSTEM

ISO 9001:2008

ENVIRONMENTAL MANAGEMENT SYSTEM

ISO14001: 2004

PACKAGING

30 lt (7.8 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

IMPROVED

F2

FORMULA

FYREWASH® F2



ROCHEM
TECHNICAL SERVICES
Established in 1978

SAFETY AND HANDLING

HAZARDS	EC Hazard rating: Xn, harmful : Xn, Harmful US NFPA rating: 1, 1, 0
PROTECTIVE MEASURES	Wear suitable protective clothing, gloves and eye/face protection and use in a well-ventilated area.
SPILLAGE	Clean-up personnel should wear suitable protective clothing and eye/face protection. Do not run off to sewer. Collect with non-combustible absorbent material (i.e. vermiculite, sand or earth).
FIRE	Use foam, carbon dioxide, dry chemicals, sand or earth. Do NOT use water jets as this may spread the fire. May produce carbon monoxide.

FIRST AID

EYES	Promptly rinse eyes with lots of clean water while lifting eyelids. Seek medical attention.
SKIN	Promptly wash skin with soap and water after removing any contaminated clothing from skin. If irritation persists seek medical attention.
INHALATION	Move affected person to fresh air/well ventilated area at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest and get prompt medical attention.
IF SWALLOWED	Do NOT induce vomiting. Let affected person drink as much water as possible and get prompt medical attention. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS.
HANDLING	Store in a well-ventilated area away from oxidisers, open flames and extreme heat.

TRANSPORT

IMDG/ADR:	Not Regulated
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USA

DOT HAZARD CLASS	Not Regulated
DOT SHIPPING NAME	Compound, Cleaning Liquid

TYPICAL PROPERTIES

APPEARANCE	light yellow liquid
DENSITY	In g/ml at 20°C: 0.98
ODOUR	Pine
FLASH POINT PMCC Concentrate:	>100°C
SOLUTION	None

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



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 Firewash Chemicals



Silver Member of ReachReady.co.uk



IMPORTANT ECOLOGICAL NOTES

FYREWASH® F2 is a water-based product that contains highly active natural solvents and surfactants, which make it an ideal on-line and off-line compressor cleaner. During fired wash it burns very cleanly upon reaching the combustion chamber. For off-line washing it is many times more effective than plain non-solvent water-based chemicals. Its natural pine-fresh smell also makes it pleasant to use.

However, remember that for off-line, crank wash cleaning all chemical solution waste and rinse water should always be collected and safely disposed of, no matter how safe or pleasant it is to handle before it passes through the gas turbine. DO NOT make the potentially very costly mistake of thinking that the chemical and rinse water drainage from water-based detergents can simply be dumped to storm drains or direct to earth. Any chemical cleaning solution and rinse water may become contaminated with potentially harmful deposits from the compressor and hot section so ALL drain off must be collected and disposed of properly. Remember, a solvent and surfactant cleaning compound like F1 will always clean more effectively than a detergent and it will also cost less to dispose of because it can be incinerated at lower cost.

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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