

GAS TURBINE COMPRESSOR CLEANERS

ZOK 27

ZOK *mx*

Environmentally
responsible
cleaning
solutions for all
gas turbine
compressors since 1980.



Used worldwide in these sectors



LESS FUEL MORE POWER FEWER EMISSIONS



Cleaning with ZOK extends the time between comprehensive overhauls, greatly improving the availability and reliability of any compressor, significantly reducing the cost of running the engine.

ZOK products are highly refined to a consistent quality, production is rigorously monitored and ZOK is accredited to recognised international standards.

All major gas turbine manufacturers approve ZOK for use on their engines in every industry sector.

ZOK products are bio-degradable and meet the demanding aquatic toxicity requirements.

Endorsed for use by the British MoD and other well known users, ZOK is a manufacturer of gas turbine compressor cleaning solutions that you can trust.

ZOK

Cleaning Power For All Gas Turbines

Cleaner and inhibitor
ZOK
27 in one

*Cleans and protects engines
with corrosion inhibitor in
one operation*

Power cleaner
formulated to replace
solvents **ZOK**
mx

*Exceptional cleaning without the
health and environmental risks
associated with solvent cleaners.*

ZOK is an international brand used to clean all types of gas turbine compressors from small helicopters to the largest power generating engines. ZOK products are approved by almost every major gas compressor manufacturer and users of gas turbines.

SIEMENS

 **GE** *Imagination at work*

 **Pratt & Whitney**
A United Technologies Company

Solar Turbines
A Caterpillar Company

**ROLLS
ROYCE**

 **MINISTRY OF DEFENCE**

 **DEPARTMENT OF DEFENSE**

**ZOK
27**

A concentrated, neutral, environmentally friendly, biodegradable, water-based detergent cleaning fluid for cleaning and corrosion inhibition of gas turbine compressors.

**ZOK
mx**

A concentrated, water-based, non-flammable, environmentally friendly, biodegradable fluid. Specifically developed for heavy-duty cleaning of gas turbine compressors.

Composition	Blend of non ionic surfactants, corrosion inhibitors, organic solvents and demineralised water.	A special blend of non ionic surfactants, organic solvents and demineralised water.
Appearance	Clear pale straw coloured liquid with a mild, pleasant odour.	Pale straw coloured liquid with a mild, pleasant odour.
Shelf Life	5 years	5 years
Typical values		
pH	7.2 – 7.5	8.0 – 8.5
Specific Gravity	1.01	1.0
Total alkali metal	<0.5 ppm after dilution	<5 ppm after dilution
Ash	<0.01%	<0.01%
Aromatic compounds	None	None
Alkyl Phenol Ethoxylates	None	None
Hydrocarbon solvents	None	None
2-Butoxyethanol	None	None
Dilution	Dilute 1 to 4 with water before use (20% solution). Demineralised water (<11µS/cm conductivity) should be used for hot/on-line cleaning. Good quality drinking water (<500µS/cm conductivity) may be used for cold/off-line cleaning. Ready to use (RTU) versions of these products are available for users who do not have access to demineralised water.	
Application	By spray ring or lance in either starter-driver (off-line) or fired (on-line) wash as directed by the engine manufacturers, in the quantities recommended in the engine manual. It is essential during hot wash that the cleaner should leave as little ash residue as possible to avoid blocking turbine blade cooling holes. ZOK 27 has a maximum ash content of <0.01%, as part of the compliance with OEM specifications for compressor washing fluid. The unique corrosion inhibitor allows engines to be left ready for an instant restart, even in salty offshore conditions.	By spray ring or lance in either starter-driver (off-line) or fired (on-line) wash as directed by the engine manufacturers, in the quantities recommended in the engine manual. It is essential during hot wash that the cleaner should leave as little ash residue as possible to avoid blocking turbine blade cooling holes. ZOK mx has a maximum ash content of <0.01%, as part of the compliance with OEM specifications for compressor washing fluid.
Water Rinse	Not necessary unless recommended by the engine manufacturer.	Recommended.
Dryout run	Not necessary unless recommended by the engine manufacturer.	Recommended.
Antifreeze	Add antifreeze below +5°C (see zok.com for more details and recommended dilutions). Compatible with Methanol, Isopropyl Alcohol and Mono Propylene Glycol. Mono Propylene Glycol is recommended by ZOK because it is biodegradable and has the minimum impact on the environment.	



HEALTH & SAFETY

ZOK 27 and **ZOK mx** are not classified as toxic or hazardous.

The following precautionary advice appears in the Safety Data Sheets. Wash off all splashes. Wear rubber gloves if sustained contact is likely. Wear goggles if spraying.

ENVIRONMENTAL

Biodegradable. Small spillage – flush away with water.

Large spillage – absorb with sand or earth and collect for disposal. Observe national and local regulations.

LOGISTICS

Packaging

12.5 litre high density polyethylene can (USA 3.3 gallons). Gross weight 13 kg.

25 litre high density polyethylene can (USA 6.6 gallons). Gross weight 26.5kg.

210 litre L-Ring high density polyethylene drums (USA 55.5 gallons). Gross weight 220 kg.

1000 litre returnable International Bulk Container (IBC). (USA 264 gallons) Gross weight 1069 kg.



Packaging is UNII export grade.

Shipping

No restrictions. Suitable for transport on passenger aircraft. IATA/CAO classified as non hazardous for international transport by sea/air.

Storage

Non flammable. Store at room temperature between +4°C and 60°C. If inadvertently frozen, **ZOK 27** and **ZOK mx** can be used after thawing out.

Tariff Code

34029090 Europe
3402.20.5100 USA

Designed and
manufactured by
ZOK in the UK



ACCREDITATIONS

Quality

BS EN ISO 9001:2008

Environmental

BS EN ISO 14001:2004

Joint Qualification System

Achilles

Health & Safety

OHSAS 18001:2007



Certificate 13300



Achilles Id. 25675



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