

# ZOK 27® MSDS

## SECTION 1 Chemical Product & Company Identification

PRODUCT NAME: Zok 27®

APPLICATION: Gas turbine compressor cleaning fluid

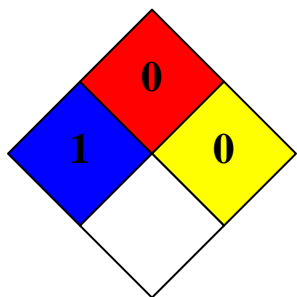
MANUFACTURER IDENTIFICATION: ZOK International Group Limited  
Elsted Marsh, Midhurst  
West Sussex, GU29 OJT, UK  
+44 (0) 1730 811920

SUPPLIER IDENTIFICATION: Zokman Products, Inc.  
1220 East Gump Road  
Fort Wayne, Indiana 46845-9794  
(260) 637-4038

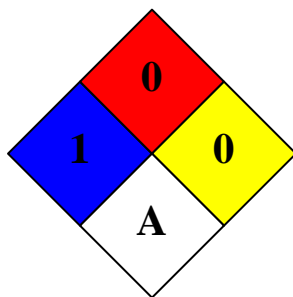
EMERGENCY NUMBER: (800) 424-9300 (24 Hours) CHEMTREC

DATE ISSUED : 1 January 2006

### NFPA



### HMIS



## SECTION 2 Composition/Information on Ingredients

<u>Hazardous Ingredient</u>	<u>CAS Number</u>	<u>Weight %</u>
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This product contains no hazardous ingredients

## SECTION 3 Hazards Identification

PRIMARY ROUTES OF EXPOSURE: Skin, Eye, Inhalation

EFFECTS OF ACUTE EXPOSURE: Not toxic by ingestion, may cause mild lung or throat irritation at high concentrations, prolonged or repeated contact may cause drying of skin

EFFECTS OF CHRONIC EXPOSURE: Not Known

## SECTION 4 First Aid Measures

INGESTION: Do NOT induce vomiting, do not give anything by mouth to an unconscious person, seek medical attention immediately

SKIN CONTACT: Remove contaminated clothing and shoes, flush area with copious amounts of clean water and soap, seek medical attention, wash clothing and footwear before re-use

EYE CONTACT: Immediately flush eye with clean water for at least 15 minutes, get medical attention

INHALATION: If irritation occurs, remove person to fresh air

## **SECTION 5 Fire Fighting Measures**

FLASH POINT:	>100°C / 212 °F (PMCC)
CONDITIONS OF FLAMMABILITY:	Non-flammable, water based
EXTINCTION MEDIA:	Use dry chemical, CO <sub>2</sub> , alcohol-proof foam, sand or fine water spray
UPPER FLAMMABLE LIMIT:	>100°C / 212 °F
LOWER FLAMMABLE LIMIT:	>100°C / 212 °F
AUTO-IGNITION TEMPERATURE:	400 °C / 752 °F
FIRE AND EXPLOSION HAZARD:	Oxides of nitrogen, carbon monoxide, carbon dioxide. Fumes are acrid and irritating
SPECIAL PPE FOR FIRE FIGHTING:	Full protective clothing and NIOSH approve full face piece positive pressure SCBA

## **SECTION 6 Accidental Release Measures**

METHODS FOR CLEANING UP SMALL SPILLS:	Absorb with sand or vermiculite, sweep up and place in container for later disposal.
METHODS FOR CLEANING UP LARGE SPILLS:	Dike for later salvage or disposal. In water, divert flow to prevent spread of product, remove for disposal.
ENVIRONMENTAL PRECAUTIONS:	Do not allow product or run off to enter any sewer or other water source.

## **SECTION 7 Handling and Storage**

HANDLING:	Use in well ventilated area, wear recommended personal protective equipment and wash after handling.
STORAGE:	Store in dry, cool well ventilated area out of direct sunlight and away from ignition sources. The product has a shelf life of 5 years.

## **SECTION 8 Exposure Control/Personal Protections**

ACGIH/TLV:  
Substance:  
None present

OSHA PEL:  
Substance:  
None present

ENGINEERING MEASURES:	Use mechanical ventilation if used in a confined area or at elevated temperatures
EYES PROTECTION:	Goggles should be worn
HAND PROTECTION:	Impermeable gloves such as butyl rubber, wash after handling
SKIN PROTECTION:	Long sleeves and long pants to prevent skin contact and closed toe footwear to prevent skin contact
RESPIRATORY PROTECTION:	Not normally required

## **SECTION 9 Physical and Chemical Properties**

PHYSICAL STATE:	Liquid
APPEARANCE:	Clear, pale straw color
ODOR:	Mild, pleasant
ODOR THRESHOLD:	Not Available
SPECIFIC GRAVITY:	1.01
VISCOSITY:	10 CPS @ 25 °C / 77 °F
DENSITY:	8.35 lbs/gal
MOLECULAR WEIGHT:	Not Available
SOLUBILITY IN WATER:	Soluble at 20°C / 68 °F
PH:	7.2-7.5
FREEZING POINT:	0 °C / 32 °F
BOILING POINT:	≥100°C / 212 °F

VAPOR PRESSURE: 0.6kPa at 15°C / 59°F  
VAPOR DENSITY: Not Available  
EVAPORATION RATE: Not Available  
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not Available

## SECTION 10 Stability and Reactivity

STABILITY: Product is stable under normal temperature and pressure  
MATERIALS TO AVOID: Product is incompatible with strong oxidizing or reducing agents  
HAZARDOUS POLYMERIZATION: Product is stable, no hazardous polymerization will occur  
HAZARDOUS DECOMPOSITION PRODUCTS: None under normal conditions

## SECTION 11 Toxicological Information

IRRITANCY: May cause eye and skin irritation  
SENSITIZATION: Triethanolamine is a skin sensitizer  
CARCINOGENICITY: Ingredients not identified by IARC or ACGIH as carcinogens  
MUTAGENICITY: Ingredients not known to be  
SYNERGISTIC PRODUCTS: Not available  
REPRODUCTIVELY TOXICITY: Ingredients not known to be  
TERATOGENICITY: Ingredients not known to be

## SECTION 12 Ecological Information

### ACUTE FISH RESULTS

<u>Species</u>	<u>Exposure</u>	<u>LC50</u>
Algae	72 hours	<100 mg/l
Fathead Minnow	24 hours	<100 mg/l

### ACUTE INVERTEBRATE RESULTS

<u>Species</u>	<u>Exposure</u>	<u>LC50</u>
Daphnia magna	48 hours	<100 mg/l

WATER HAZARD CLASS: 1, slightly hazardous for water when discharged in large volumes

## SECTION 13 Disposal Considerations

DISPOSAL: Dispose of by methods in compliance with local, state and federal regulations.  
MOBILITY: May penetrate the soil as it is biodegradable.  
BIOACCUMULATIVE POTENTIAL: There is no evidence to suggest that bioaccumulation will occur (LOG Pow <3).  
Biodegradable according to OECD 301D.  
SEWAGE TREATMENT PLANTS: Not toxic to sewage organisms at concentrations expected to be found in sewage treatment plants.

## SECTION 14 Transport Information

No restrictions. The product is non-hazardous. Suitable for uplift on passenger aircraft IATA/ICAO. Classified as non-hazardous for international transport by sea, not restricted for international transport by air and not subject to the provision of ADR. Tariff code 3402 20 51 00.

<b>SECTION 15</b> <b>Regulatory Information</b>
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NATIONAL REGULATIONS, USA:

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200:

This product has been classified in accordance with the Hazard Communication Rule.

CERCLA/SUPERFUND, 40 CFR 117, 302:

This product does not contain Reportable Quantity (RQ) Substances.

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) – SECTIONS 302, 311, 312, AND 313:

SECTION 302 – EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):

This product does not contain substances listed as an Extremely Hazardous Substances.

SECTIONS 311 AND 312 – MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370):

This product is non-hazardous.

SECTION 313 – LIST OF TOXIC CHEMICALS (40 CFR 372):

This product does not contain substances on the List of Toxic Chemicals.

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All components are listed on the TSCA inventory.

CALIFORNIA PROPOSITION 65:

This product does not contain substances which require warning under California Proposition 65.

NATIONAL REGULATIONS, CANADA:

WORK PLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

NATIONAL REGULATIONS, MEXICO:

This product has been classified in accordance with the hazard criteria of the Official Mexican Standard and the MSDS contains all the information required by the Official Mexican Standard.

SAFETY PHRASES:      S26, S27

RISK PHRASES:        R52, R53

<b>SECTION 16</b> <b>Other Information</b>
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