

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION:

Brand Name ZOK 27 Gas Turbine Compressor Cleaner
Chemical Name Mixture
Common Name ZOK 27 Gas Turbine Compressor Cleaner
Formula N/A
Molecular Weight N/A

MANUFACTURER:

ZOK Incorporated
8226 Kerr Street
Houston, Texas 77029

EMERGENCY TELEPHONE: 800-727-6027
24-HOUR TELEPHONE: 888-582-3178

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	WEIGHT%	EXPOSURE LIMITS	
			OSHA PEL	ACGIH TWA
Proprietary Nonionic Surfactant	Trade Secret	N/A	N/E	N/E
Dipropylene Glycol Monomethyl Ether	34590-94-8	<1.5	100 ppm (skin) 150 ppm STEL	100 ppm (skin) 150 ppm STEL
Proprietary Corrosion Inhibitor Blend	Mixture	N/A	N/E	N/E
Water	7732-18-5	Balance	N/E	N/E

3. HAZARDS IDENTIFICATION

NFPA Rating: Health Flammability Reactivity

EMERGENCY OVERVIEW

Clear, pale straw colored liquid with a mild, pleasant odor.
CAUTION! May cause eye and mucous membrane irritation.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY: Inhalation (breathing); eye contact.

SYMPTOMS OF EXPOSURE:

- ? **INHALATION:** Inhalation of vapors at high temperatures may cause irritation of respiratory tract.
 - ? **EYE CONTACT:** Direct contact or exposure to vapors may cause irritation.
 - ? **SKIN CONTACT:** May cause irritation. Prolonged contact could cause defatting.
 - ? **INGESTION:** Headache, nausea, vomiting, dizziness, gastrointestinal upset.
- MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

4. FIRST AID MEASURES:

- ? **INHALATION:** Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.
- ? **EYE CONTACT:** Immediately rinse eye with water. Remove any contact lenses and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Get medical attention if irritation persists.
- ? **SKIN CONTACT:** Wash affected areas with plenty of water, and soap if available, for several minutes. Remove and clean contaminated clothing and shoes.
- ? **INGESTION:** Give 3-4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person.

5. FIRE FIGHTING MEASURES: Flash Point and Method...>212°F (Pensky-Marten Closed Cup). Will not burn.

- ? **EXTINGUISHING MEDIA:** For small fires, use water spray, foam, CO₂, or dry chemical. For large fires, use water spray, fog, or alcohol foam.
- ? **SPECIFIC FIREFIGHTING INSTRUCTIONS:** Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side.
- ? **FIREFIGHTING EQUIPMENT:** As in any fire, wear NIOS/MSHA approved, pressure-demand self-contained breathing apparatus and full protective gear.

6. DISPOSAL AND ACCIDENTAL RELEASE MEASURES: Wear appropriate protective equipment. See section 8.

- ? **ON LAND: Small Spills:** Absorb with sand or vermiculite; sweep up and place in a compatible container for later disposal. Residue can be washed with water.
Large Spills: Dike for a later salvage or disposal. Avoid runoff into storm sewers and ditches which lead to waterways.

- ? **IN WATER:** If possible, divert flow to prevent spread of product; remove liquid for subsequent disposal. If this is not possible, dilute with large quantities of water and agitate to enhance biodegradation.
- ? **DISPOSAL:** Dispose of by methods in compliance with Local, State, and Federal regulation.

7. HANDLING AND STORAGE:

- ? **HANDLING:** Wear appropriate protective equipment (See Section 8). Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Maintain good working practices and high standards of personal hygiene and plant cleanliness at all times. Frequent or prolonged contact with the skin could cause defatting, leading to dry cracking. The use of an emollient cream is recommended after prolonged skin contact. Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets.
- ? **STORAGE:** Store between 40°F and 170°F. If inadvertently frozen, the product is serviceable after thawing. The product has a shelf life of at least five years.

8. EXPSURE CONTROLS/PERSONAL PROTECTION:

- ? **ENGINEERING CONTROLS:** Use local exhaust or general dilution ventilation to maintain exposures below established permissible exposure levels.
- ? **PERSONAL PROTECTION: Respirator:** For exposures above the exposure limit or in working areas that are confined or if heavy misting is expected, use a NIOSH/MSHA approved chemical respirator that has been selected by an industrial hygienist or other technically qualified person for the specific work conditions.
Eye Protection: Wear safety glasses or chemical splash goggles.
Gloves: Use rubber gloves. The use of an emollient cream is recommended after skin contact.
Clothing: Wear long sleeve shirts and long pants. Contaminated clothing should be removed and laundered.
Other : Eye wash

9. PHYSICAL AND CHEMICAL PROPERTIES:

State	Clear Liquid	Weight Per Gallon.....	8.50 pounds
Color	Pale, straw	Specific Gravity @ 68°F.....	1.010
Odor.....	Mild, pleasant	Water Solubility.....	Soluble
Melting Point °F.....	N/D	pH.....	7.4 - Concentrate
Boiling Point °F.....	212		7.3 - As used, diluted
Bulk Density, lb/cu. ft	N/A		1:4 with water (20% solution)

10. STABILITY AND REACTIVITY:

- ? **REACTIVITY:** Stable.
- ? **INCOMPATIBILITIES:** Strong oxidizing or reducing agents.
- ? **HAZARDOUS DECEOMPOSITION PRODUCTS:** Thermal decomposition will produce CO, CO₂, and oxides of nitrogen.
- ? **CONDITIONS TO AVOID:** None known.

11. ADDITIONAL COMMENTS:

- CERCLA Reportable Quantity..... N/A
- RCRA Hazardous Waste Number..... N/A
- D.O.T. Shipping Number..... Non-Regulated
- UN/NA Number..... None
- SARA Title III, Section 302..... No extremely hazardous chemicals
- Section 311/312 Hazard Category..... None
- Section 313 Chemical Category..... None
- EPA TSCA Inventory - All components of this product are listed on the EPA TSCA Inventory.
- NOTE: Product contains no materials currently classified as carcinogenic by NTP, IARC, or OSHA.

12. NOTICE:

The information contained herein is believed to be accurate and is offered in good faith. Because product use is beyond our control, no warranty is given, expressed or implied. ZOK, Inc. cannot assume any liability for the use of information contained herein. To determine applicability or effect of any law or regulation with respect to the product, users should consult a legal advisor or appropriate governmental agency.

- ABBREVIATIONS:**
- N/A - Not Applicable
 - N/D - Not Determined
 - N/E - Not Established