

# MATERIAL SAFETY DATA SHEET



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Date Issued: 02/02/2010  
MSDS No: KAESER SIGMA FG-680 022307  
Date Revised: 08/20/2010  
Revision No: 1

## SIGMA Lubricant FG-680

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** SIGMA Lubricant FG-680  
**GENERAL USE:** Lubricant and corrosion inhibitor  
**CHEMICAL FAMILY:** Synthetic based lubricant

**MANUFACTURER**

Manufactured for Kaeser Compressors, Inc.  
511 Sigma Drive  
Fredericksburg, VA 22408  
**Product Stewardship:** 281-354-8600

**24 HR. EMERGENCY TELEPHONE NUMBERS**

**USA :** 800-424-9300  
**International :** 703-527-3887(collect calls accepted)

### 2. HAZARDS IDENTIFICATION

**POTENTIAL HEALTH EFFECTS**

**EYES:** May cause irritation.

**SKIN:** May irritate the skin after prolonged periods of contact.

**INGESTION:** May cause diarrhea.

**INHALATION:** Hydrocarbon mist may line breathing passages with oil making breathing difficult.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Poly Alpha Olefin Synthetic	85 - 89	68037-01-4
Synthetic Olefin	8 - 12	9003-29-6
Synthetic Corrosion and Antiwear	0.5 - 0.1	80939-62-4
Synthetic Oxidation Inhibitor	0.2 - 0.5	41484-35-9
Synthetic Ashless EP Additive	0.1 - 0.5	10254-57-6
Mixed Alkyl Diphenyl Amine	0.1 - 0.3	68411-46-1

**COMMENTS:** This product contains no hazardous substances within the definition of OSHA Regulation 29 CFR 1910.1200.

### 4. FIRST AID MEASURES

**EYES:** Flush with water until all residual material is gone. If irritation persists, seek medical help.

**SKIN:** Wash thoroughly with hand cleanser, followed by soap and water. Contaminated clothing should be dry cleaned before reuse.

**INGESTION:** Wash out mouth immediately. Do not induce vomiting. Consult physician.

**INHALATION:** Clear air passage. If respiratory difficulty continues, seek medical help.

### 5. FIRE FIGHTING MEASURES

**FLASH POINT AND METHOD:** > 249°C (480°F) COC

**AUTOIGNITION TEMPERATURE:** > 315°C (600°F)

**EXTINGUISHING MEDIA:** Foam, dry powder, Halon®, carbon dioxide, sand, earth and water mist.

Unsuitable: Water jet.

**OTHER CONSIDERATIONS:** Not flammable at ambient temp.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Contain spill and keep from entering waterways. Absorb on porous material. Large quantities can be pumped.

### ENVIRONMENTAL PRECAUTIONS

**LAND SPILL:** Do not allow it to enter drains.

**SPECIAL PROTECTIVE EQUIPMENT:** Wear gloves and protective overalls.

## 7. HANDLING AND STORAGE

**HANDLING:** No special handling precautions necessary.

**STORAGE:** Do not store at elevated temperatures.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Glasses, if applied to parts in motion.

**SKIN:** Oil-proof gloves for hypersensitive persons.

**RESPIRATORY:** Hydrocarbon absorbing respirator if misting.

**PROTECTIVE CLOTHING:** Overalls.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Mild Hydrocarbon

**COLOR:** Clear

**pH:** Neutral

**PERCENT VOLATILE:** None

**VAPOR PRESSURE:** < 0.01

**VAPOR DENSITY:** Greater than air

**BOILING POINT:** > 371°C (700°F)

**POUR POINT:** -35°C

**FLASH POINT AND METHOD:** > 249°C (480°F) COC

**EVAPORATION RATE:** Negligible

**DENSITY:** > 0.8

**OXIDIZING PROPERTIES:** None

## 10. STABILITY AND REACTIVITY

**STABILITY:** Chemically stable under normal conditions. No photoreactive agents.

**CONDITIONS TO AVOID:** Powerful sources of ignition and extreme temperatures.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Burning generates smoke, airborne soot, hydrocarbons and oxides of carbon, sulfur and nitrogen. Residue mainly comprised of soot and mineral oxides.

**INCOMPATIBLE MATERIALS:** Strong inorganic and organic acids, oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**ORAL LD<sub>50</sub>:** > 2000 mg/kg

**Notes:** Extrapolated from component data

**INHALATION LC<sub>50</sub>:** Not applicable.

**SKIN EFFECTS:** Very mild

**CHRONIC:** None known.

**SUBCHRONIC:** Not known

**CARCINOGENICITY**

**IARC:** No

**NTP:** No

**OSHA:** No

**SENSITIZATION:** Not known

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Due to its fluid nature and specific gravity, this product will float or spread across water making it a nuisance contaminant. It is not thought to be toxic to marine or land organisms.

**BIOACCUMULATION/ACCUMULATION:** Relatively well behaved. Bioaccumulation potential nil.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Consider recycling. This product, as sold, does not meet the RCRA characteristics of a hazardous waste. Under RCRA, it is the responsibility of the user, at the time of disposal, to determine whether the product meets the RCRA criteria for hazardous waste. Contact a waste disposal company or local authority for advice.

**EMPTY CONTAINER:** See waste disposal section listed above.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**UN/NA NUMBER:** N/A

**OTHER SHIPPING INFORMATION:** Nonhazardous

**ROAD AND RAIL (ADR/RID):** Bulk Nonhazardous

**AIR (ICAO/IATA):** Bulk Nonhazardous

**VESSEL (IMO/IMDG):** Bulk Nonhazardous

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** None

**313 REPORTABLE INGREDIENTS:** N/A

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA REGULATORY:** Nonhazardous

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

**TSCA REGULATORY:** All components are listed

**CALIFORNIA PROPOSITION 65:** N/A

### CANADA

**WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):** Not regulated

**DOMESTIC SUBSTANCE LIST (INVENTORY):** All components are listed

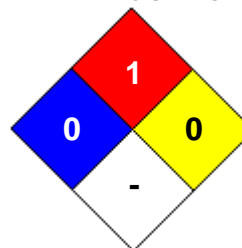
## 16. OTHER INFORMATION

**REVISION SUMMARY:** Revision #: 1. This MSDS replaces the February 2, 2010 MSDS. Any changes in information are as follows: In Section 1: Approval Date, Date Prepared; In Section 3: List of Ingredients

## HMIS RATING

HEALTH:	0
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

## NFPA CODES



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