

1. Identification	
Product name	HYKOGEEN FS
Other means of identification	No data available.
Recommended use:	Metalworking fluid
Restrictions on use:	Industrial use only

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name:	Fuchs Lubricants Co.
Address:	17050 Lathrop Avenue
	Harvey, Illinois 60426
Telephone:	708-333-8900
Fax:	708-333-9180
Contact Person:	EHS Department
E-mail:	msds@fuchs.com

Emergency telephone number: 708-333-8900 (Bus. hrs) 800-255-3924 (24 hrs)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Carcinogenicity

Category 1A

Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

May cause cancer.

Precautionary Statement



Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Response:	If exposed or concerned: Get medical advice/attention.
Storage:	Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not	None.
result in GHS classification:	

Unknown toxicity Health

Acute toxicity, inhalation, dust or mist	60.39 %
Acute toxicity, inhalation, vapor	99.94 %
Acute toxicity, dermal	22.37 %
Acute toxicity, oral	12.64 %

3. Composition/information on ingredients

Hazardous Component(s):

Chemical name	CAS-No.	Concentration
Mineral oil	Confidential	15 - 40%
Graphite	7782-42-5	10 - 30%
Stannous compound	Confidential	10 - 30%
Sodium stearate	822-16-2	1 - 5%
Crystalline silica	14808-60-7	0.1 - 1%

Specific chemical identities and/or exact percentages have been withheld as trade secrets.

4. First-aid measures	
Ingestion:	Rinse mouth thoroughly. Call a Poison Center or doctor if you feel unwell. Do NOT induce vomiting.
Inhalation:	Move to fresh air. Call a Poison Center or doctor if you feel unwell.
Skin Contact:	Remove contaminated/saturated clothing and shoes. Wash contact areas with soap and water. If skin irritation occurs: Get medical advice/attention.
Eye contact:	Flush thoroughly with water. If irritation occurs, get medical assistance. Continue to rinse for at least 15 minutes.



SAFETY DATA SHEET

Most important symptoms/effects, acute and delayed		
Symptoms:	No data available.	
Indication of immediate medical at	ttention and special treatment needed	
Treatment:	Symptoms may be delayed.	
5. Fire-fighting measures		
General Fire Hazards:	No unusual fire or explosion hazards noted.	
Suitable (and unsuitable) extingu	ishing media	
Suitable extinguishing media:	No data available.	
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.	
Specific hazards arising from the chemical:	Heat may cause the containers to pressurize and possibly rupture. During fire, gases hazardous to health may be formed.	
Special protective equipment and precautions for firefighters		
Special fire fighting procedures:	No data available.	
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment appropriate for industrial fires.	
6. Accidental release measures		
Personal precautions, protective equipment and emergency procedures:	See Section 8 of the SDS for Personal Protective Equipment. Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ensure adequate ventilation.	
Methods and material for containment and cleaning up:	Absorb with sand or other inert absorbent. Stop the flow of material, if this is without risk.	
Environmental Precautions:	Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so and protect against releases into the environment. Remediate as appropriate.	



7. Handling and storage Precautions for safe handling: End-users should follow industry best practices for handling and using this product. Guidance may be found using the current version of ASTM Standard E1497-05: Standard Practice for Selection and Safe Use of Water-Miscible and Straight Oil Metal Removal Fluids Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

Exposure Limits

Chemical name	type	Exposure Limit Values	Source
Mineral oil - Mist.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Graphite - Respirable fraction.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (03 2012)
Graphite - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Graphite - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Stannous compound - as Sn	STEL	0.2 mg/m3	US. ACGIH Threshold Limit Values (03 2012)
Stannous compound - as Sn	PEL	0.1 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Sodium stearate	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (03 2012)
Crystalline silica - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values (03 2012)

Protective Measures: Use personal protective equipment as required.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from supervisor on the company's respiratory protection standards.

Eye Protection: Wear safety glasses with side shields (or goggles).

Skin and Body Protection:

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.



Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. Discard contaminated footwear that cannot be cleaned. Avoid contact with skin, eyes, and clothing.

9. Physical and chemical properties

Appearance	
Physical state:	Liquid
Form:	No data available.
Color:	Gray
Odor:	Mild petroleum
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	149 °C (300 °F)
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.03
Solubility(ies)	
Solubility in water:	Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	> 21 mm2/s (40 °C)

10. Stability and reactivity

Reactivity:

Not reactive during normal use.



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Chemical Stability:	No data available.
Possibility of Hazardous Reactions:	None under normal conditions.
Conditions to Avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	formaldehyde

11. Toxicological information

Information on likely routes of exposure

Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.	
Inhalation:	Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.	
Skin Contact:	Prolonged skin contact may cause redness and irritation.	
Eye contact:	Eye contact is possible and should be avoided.	
Symptoms related to the physica Ingestion:	I, chemical and toxicological characteristics No data available.	
Inhalation:	No data available.	
Skin Contact:	No data available.	
Eye contact:	No data available.	
Information on toxicological effects		
Acute toxicity (list all possible routes of exposure)		
Oral Product:	ATEmix (): 2000 - 5000 mg/kg	
Dermal Product:	ATEmix (): 2000 - 5000 mg/kg	
Inhalation Product:	Not classified for acute toxicity based on available data.	
Repeated dose toxicity Product:	No data available.	
MSDS_US - 00000005306		



Skin Corrosion/Irritation Product:	No data available.	
Serious Eye Damage/Eye Irritation Product: No data available.		
Respiratory or Skin Sensitization Product:	n No data available.	
Carcinogenicity Product:	No data available.	
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:		
Crystalline silica	Overall evaluation: 1. Carcinogenic to humans.	
US. National Toxicology Pr Crystalline silica	r ogram (NTP) Report on Carcinogens: Known To Be Human Carcinogen.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified		
No carcinogenic components		
No carcinogenic components Germ Cell Mutagenicity		
. .		
Germ Cell Mutagenicity	s identified	
Germ Cell Mutagenicity In vitro Product: In vivo	s identified No data available.	
Germ Cell Mutagenicity In vitro Product: In vivo Product: Reproductive toxicity	s identified No data available. No data available. No data available.	
Germ Cell Mutagenicity In vitro Product: In vivo Product: Reproductive toxicity Product: Specific Target Organ Toxicity -	s identified No data available. No data available. No data available. Single Exposure No data available.	
Germ Cell Mutagenicity In vitro Product: In vivo Product: Reproductive toxicity Product: Specific Target Organ Toxicity - Product: Specific Target Organ Toxicity -	s identified No data available. No data available. Single Exposure No data available. Repeated Exposure	



12. Ecological information	
General information:	This product has not been evaluated for ecological toxicity or other environmental effects.
13. Disposal considerations	
Disposal instructions:	Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. It is the responsibility of the product user or owner to determine at the time of disposal, which waste regulations must be applied.
Contaminated Packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

This material is not subject to transport regulations.

15. Regulatory information

US Federal Regulations

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

16.Other information, including date of preparation or last revision

Issue Date:	27.05.2015
Revision Date:	27.05.2015



Disclaimer:	This information i
Further Information:	No data available.
Version #:	1.0

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.