HANGSTERFER'S®
Research, Development & Manufacturing of Metalworking Lubricants

Material Safety Data Sheet

Prepared according to OSHA Hazard Communication Standard (29 CFR 1910.1200) and ANSI MSDS Standard (Z400.1).
Complies with Canadian Workplace Hazardous Materials Information System (WHMIS) standards.

Validation Date 02-24-2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name S-500 CF

Product Code 135

Material Uses Coolant

Manufacturer Hangsterfer's Laboratories, Inc., 175 Ogden Road, Mantua, NJ 08051; Phone 856-468-0216, Fax 856-468-0200, Website: www.hangsterfers.com

Emergency Telephone Number Chemtrec 1-800-424-9300 in US
Canutec 1-613-996-6666 in Canada
For international assistance, dial Chemtrec US number 1-703-527-3887

2. HAZARDS IDENTIFICATION

Acute Health Effects

Skin Not expected to be a primary skin irritant.
Eye None known
Inhalation Not expected to present a hazard under normal use conditions.
Ingestion No known effect

HMIS			NFPA		
	Health Hazard	0		**Health Hazard**	0
	Fire Hazard	1		**Fire Hazard**	1
	Physical Hazard	0		**Reactivity**	0

Chronic Health Effects No known effect

Chronic Toxicity No known effect

Carcinogenic Effects None known

Aggravated Medical Conditions None known

Miscellaneous Hazards Avoid prolonged and/or repeated contact with skin. Prolonged and/or repeated contact with this material may produce mild skin irritation or inflammation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

If any of the components of this product are defined as hazardous by OSHA Hazard Communication Standard 1910.1200 and are present at 1% or more (0.1% or more for carcinogens) they will be listed in this section. If no components appear in this section, no components of the product meet or exceed the reporting requirements. OSHA PELs and ACGIH TLVs refer to the concentration in air of the specific chemical as measured by specific analytical methods.

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

Skin Contact Wash skin with soap and water. Consult a physician if necessary.

Inhalation Move to fresh air. Consult a physician if necessary.

Ingestion	Do not induce vomiting. Drink plenty of water. Consult a physician if necessary.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Material may burn but does not ignite readily.
Suitable Extinguishing Media	Water spray or fog, dry chemical, carbon dioxide (CO2) or foam. Cool containers with flooding quantities of water until well after fire is out.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.
Hazardous Combustion Products	Carbon oxides
Specific Hazards Arising from the Chemical	May be ignited by heat, sparks or flames. Keep product and empty container away from heat and sources of ignition.
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. Avoid contact with the skin and the eyes. Wear boots, gloves and protective suit when handling large spills. Ensure adequate ventilation.
Methods for Containment	Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.
Methods for Clean-up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take all appropriate steps to avoid contamination of ground water.
Other Information	Report spills as required to the appropriate authorities.

7. HANDLING AND STORAGE

Handling	Avoid contact with eyes. Keep in a well ventilated place. Do not puncture, crush or incinerate containers.
Storage	Keep container tightly closed in a dry and well ventilated place. Keep away from direct sunlight. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits below those specified under Engineering Controls.
Engineering Controls	Use in well ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits (ACGIH TLV TWA: 5 mg/m^3; ACGIH TLV STEL: 10 mg/m^3; OSHA PEL TWA: 5 mg/m^3).
Eye/face Protection	Safety glasses with side-shields.
Skin Protection	Use protective gloves and clothing if contact with product is likely.
Respiratory Protection	If personal exposure levels cannot be maintained below accepted exposure limits, NIOSH/MSHA approved respiratory protection should be worn.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Green.	**Odor**	Mild.
Physical State	Liquid.	**pH (10% soln/water)**	9.1
Flash Point (COC)	162°C / 324°F	**Boiling Point/Range**	143°C / 289°F
Melting Point/Range	May begin to solidify at 0°C/ 32°F.		
Specific Gravity (Water=1)	0.93	**Solubility In Water**	Soluble.
Vapor Pressure	<0.01 mmHg @ 20 °C	**Vapor Density (Air=1)**	> 5
VOC Content, % Vol	No data available	**Volatility**	No data available
Viscosity	SUS @ 100°F = 200 cSt @ 40°C = 43		

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials Acids. Incompatible with oxidizing agents. Alkalines.

Hazardous Decomposition Products Carbon oxides.

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

This section relates to available toxicology information on the complete product. Information on components classified as hazardous is listed in Section 3.

Acute Toxicity

LD50 Oral: > 15000 mg/kg (rat, based on laboratory testing of this product).

Irritation Skin Irritation - OECD 404: Non-irritating (Rabbit, predicted based on data on components). Not expected to be a primary eye irritant.

Corrosivity OECD 404: Non corrosive (Rabbit, based on laboratory testing of this product).

Sensitization None known

Chronic Toxicity No known effect

Carcinogenicity This product contains no ingredients with a concentration of 0.1% or more which are known to be carcinogenic.

Other Adverse Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity Ecotoxicity and biodegradability of this complete mixture have not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water and should not be considered readily biodegradable. If information is available on any of the individual components listed in Section 3, it will appear in a table below.

Persistence/Degradability No additional remarks.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with Federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT	Not regulated.	**TDG**	Not regulated.	**MEX**	Not regulated.
ICAO	Not regulated.	**IATA**	Not regulated.	**IMDG/IMO**	Not regulated.
RID	Not regulated.	**ADR**	Not regulated.	**ADN**	Not regulated.

15. REGULATORY INFORMATION

U.S. Regulations & Inventories No regulatory requirements found. All components of this product are either listed on the TSCA inventory or are exempt from listing requirements.

Canada Regulations & Inventories No regulatory requirements found. All components of this product are either listed on applicable inventories or are exempt from listing requirements.
This product has been classified in accordance with the hazard criteria of the Canadian CPR (Controlled Products Regulations) and the MSDS contains all the information required by the CPR.
Product Classification: Not hazardous

16. OTHER INFORMATION

Regulatory Lists Searched & Other Sources of Information

ACGIH - American Converence of Governmental Industrial Hygienists
ADN - European Agreement for International Carriage of Dangerous Goods by Inland Waterways
ANSI - American National Standards Institute
CAS - Chemical Abstract Services
CHINA - China Inventory
DOT - United States Department of Transportation
EINECS - European Union (EU) European Inventory of Existing Commercial Chemical Substances
IARC - International Agency for Research on Cancer
ICAO - International Civil Aviation Organization
MARTK - Massachusetts Right To Know List
NFPA - United States National Fire Protection Association
NJRTK - New Jersey Right To Know List
OSHA - United States Occupational Safety & Health Administration
PICCS - Philippines Inventory of Chemicals and Chemical Substances
RID - European Agreement for International Carriage of Dangerous Goods by Rail
SARA - United States Superfund Amendments & Reauthorization Act
TSCA - US Toxic Substances Control Act
AICS - Australian Inventory of Chemical Substances
ADR - European Agreement for International Carriage of Dangerous Goods by Road
CAP65 - California Proposition 65 Hazard List
CERCLA - Comprehensive Environmental Response, Compensation & Liability Act
CPR - Canadian Controlled Products Regulations
DSL - Canada Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods Code
NDSL - Canada Non-Domestic Substances List
NIOSH - United States National Institute for Occupational Safety & Health
NTP - United States National Toxicology Program
PARTK - Pennsylvania Right To Know List
RCRA - United States Resources Conservation & Recovery Act
RIHSL - Rhode Island Hazardous Substance List
TDG - Canada Transportation of Dangerous Goods Act
WHMIS - Canada Workplace Hazardous Materials Information System

Definitions

EC50 - Effective Concentration (Concentration of a compound where 50% of the expected effect is observed.)
LC50 - Lethal Concentration (The concentration in water that will kill 50% of the test animals within a specific period of time, usually 96 hours.)
LD50 - Lethal Dose (The single dose that will kill 50% of the test animals by any route other than inhalation such as by ingestion or skin contact.)
OEL - Occupational Exposure Limit
PEL - Permissible Exposure Limits
STEL - Short Term Exposure Limit
TLV - Threshold Limit Value
TWA - Time Weighted Average
TWAEV - Time Weighted Average Exposure Value

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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End of MSDS