

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification	
Common Name Hangsterfer's S-500 ®	Code H-S500-06_D
Supplier Company Name: Company Address: Phone: Fax:	MSDS# 00445
	Validation Date 04/06/2009
	Print Date 04/06/2009
Synonym Water Soluble Oil	In case of Emergency Emergency Response: Chemtrec: (800) 424-9300 (USA) or (703) 527-3887 If there are any questions regarding this MSDS, contact Hangsterfer's Laboratories. Phone: (856) 468-0216.
Trade name S-500	
Material Uses Metal industry: Metalworking fluid	
Manufacturer Hangsterfer's Laboratories, Inc. 175 Ogden Road Mantua, NJ 08051 USA Phone: (856) 468-0216 Fax: (856) 468-0200	

Section 2. Composition and Information on Ingredients				
Name	CAS #	% by Weight	TLV/PEL	LC ₅₀ /LD ₅₀
Refer to Section (8) for any applicable exposure limits.				

Section 3. Hazards Identification	
Routes of Entry	Eyes: Highly unlikely - Flush eyes with running water for at least 15 minutes. Get medical attention if necessary. Skin: Highly unlikely - Remove clothing and launder. Wipe off excess, and wash with mild soap and water. Inhalation: Highly unlikely - Place person in well ventilated area/location. Seek medical attention if necessary. Ingestion: Highly unlikely - Do not induce vomiting. Seek immediate medical attention.
Potential Acute Health Effects	Non-irritating to the eyes. Non-corrosive for skin. Non-irritant for skin. Non-sensitizer for skin. Non-permeator by skin. Non-hazardous in case of inhalation. Very slightly to slightly irritating in case of ingestion.
Potential Chronic Health Effects	No known chronic health effects according to our database. CARCINOGENIC EFFECTS: None. MUTAGENIC EFFECTS: None. TERATOGENIC EFFECTS : None. The substance is not toxic to blood, kidneys, lungs, the nervous system, the reproductive system, liver, mucous membranes, heart, bladder, spleen, brain, digestive system, lymphatic system, peripheral nervous system, gastro-intestinal tract, cardiovascular system, upper respiratory tract, endocrins, immune system.

Section 4. First Aid Measures

Eye Contact	Flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. Seek medical attention if necessary.
Skin Contact	Wipe off excess, and wash with mild soap and water. Seek medical attention if necessary.
Hazardous Skin Contact	No additional hazardous information.
Inhalation	Place the person in a well ventilated area. Seek medical attention if necessary.
Hazardous Inhalation	No additional hazardous information.
Ingestion	Do not induce vomiting. Have conscious person drink several glasses of water or milk. If the person is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention immediately and show the container, label or Material Safety Data Sheet.
Hazardous Ingestion	No additional hazardous information.

Section 5. Fire and Explosion Data

Flammability of the Product	Combustible at elevated temperatures.
Auto-Ignition Temperature	Not determined.
Flash Points	OPEN CUP: 170°C (338°F) (Cleveland).
Flammable Limits	LOWER: 1% UPPER: 7%
Products of Combustion	Hazardous products of combustion can include carbon oxides (CO, CO ₂), as well as other byproducts.
Fire Hazards in Presence of Various Substances	Very slightly to slightly flammable in presence of open flames and sparks. Non-flammable in presence of shocks, of heat, of oxidizing materials, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture.
Explosion Hazards in Presence of Various Substances	Non-explosive in presence of shocks, of heat, of oxidizing materials, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO ₂ , water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	No additional remark.
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Mop up or absorb with an inert DRY material and place in an appropriate container.
Large Spill	Combustible material at elevated temperatures. Keep away from open flames, sparks, and sources of ignition. Stop leak if without risk. Mop up or absorb and place in appropriate container (s).

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Section 7. Handling and Storage

Handling	Avoid contact with eyes. Keep container closed. Use in a well-ventilated area. Wash thoroughly after handling. Do not puncture or incinerate container(s).
Storage	Keep away from open flames, sparks, and sources of ignition. Emptied containers may contain product residues. Precautions also apply to product residues.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Good general ventilation should be sufficient to control airborne levels if user/worker activities generate mist(s). However, local exhaust ventilation may be necessary in areas of poor ventilation.	
Personal Protection	Safety glasses. Work Apparel . Gloves.	
Personal Protection in Case of a Large Spill	Splash glasses/goggles. Full suit. Boots. Gloves. Suggested clothing should be sufficient; contact the manufacturer regarding questions with this product.	
Chemical Name or Product Name	CAS #	Exposure Limits
Severely Refined Petroleum Distillates(heavy): If mists are generated, the following exposure limits apply:	64742-52-5	TWA: 5 (mg/m ³) from ACGIH (TLV) TWA: 5 (mg/m ³) from OSHA (PEL)
Severely Refined Petroleum Distillates(light): If mists are generated, the following exposure limits apply:	64742-53-6	TWA: 10 (mg/m ³) from ACGIH (TLV) TWA: 5 (mg/m ³) from OSHA (PEL)

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	Odor	Mild
Molecular Weight	Not applicable.	Taste	Mild
pH (10% Soln/Water)	9.1	Color	Green
Boiling Point	143°C (289°F).		
Melting Point	May start to solidify at 0°C (32°F).		
Critical Temperature	Not determined.		
Specific Gravity	0.96		
Vapor Pressure	<0.01 mm of Hg (@ 20°C)		
Vapor Density	>5 (Air = 1)		
Volatility	VOC Content: 8.58% (v/v).		
Odor Threshold	Not determined.		
Evaporation rate	<0.01 [Butyl acetate.]		
Viscosity	NA		
Water/Oil Dist. Coeff.	The product is more soluble in water.		
Ionicity (in Water)	Non-ionic.		
Dispersion Properties	Dispersible in cold water, hot water. Slightly dispersed in methanol. Not dispersible in diethyl ether, n-octanol, acetone.		
Solubility	Soluble in cold water, hot water. Slightly soluble in methanol. Insoluble in diethyl ether, n-octanol, acetone.		

Physical Chemical Comments	No additional remark.
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Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
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Conditions of Instability	No additional remark.
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Incompatibility with various substances	Reactive with acids. Slightly reactive to reactive with oxidizing agents. Very slightly to slightly reactive with alkalis. Non-reactive with reducing agents, combustible materials, organic materials, metals, moisture.
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Hazardous Decomposition Products	Hazardous products of decomposition can include carbon oxides (CO, CO ₂), as well as other byproducts.
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Hazardous Polymerization	Will not occur.
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Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): >= 15000 mg/kg (Rat) (Determined experimentally). Acute Dermal Irritation/Corrosion (OECD 404): Result: Non-irritating and Non-corrosive(Rabbit).
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Chronic Effects on Humans	No known chronic effects on humans.
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Other Toxic Effects on Humans	Ames Screening Assay (Reverse Bacterial Mutation Screen): Negative [Pass]
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Special Remarks on Toxicity to Animals	No additional remark.
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Special Remarks on Chronic Effects on Humans	No additional remark.
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Special Remarks on other Toxic Effects on Humans	No additional remark.
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Section 12. Ecological Information

Ecotoxicity	Not determined to be an ecotoxin.
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BOD5 and COD	Contact the manufacturer for further information.
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Products of Biodegradation	Hazardous products of biodegradation can include carbon oxides (CO, CO ₂), as well as other byproducts
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Toxicity of the Products of Biodegradation	The products of degradation are non-toxic.
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Special Remarks on the Products of Biodegradation	No additional remark.
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Section 13. Disposal Considerations

Waste Disposal	Recycle to process, if possible. Consult your local or regional authorities. Dispose of in accordance with local and federal regulations. Contact the manufacturer for further information.
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Section 14. Transport Information

DOT Classification	Not a DOT controlled material in the United States of America(U.S.A.). Product is considered safe for transport in the U.S.A. Product is not regulated by the United Nations(U.N.).
Propper Shipping Name	NONE
DOT Identification Number	Not applicable (PIN and PG).
Packing Group	NONE
Hazardous Substances Reportable Quantity	Not applicable.
Special Provisions for Transport	No special provisions for transport.
TDG Classification	Not controlled under TDG (Canada).
IMDG Classification	Not controlled under IMDG.
IATA Classification	Not controlled under IATA.

Section 15. Regulatory Information

Federal and State Regulations	<p>All ingredients that make up this product are listed on the TSCA inventory and are approved for industry use in the U.S.A.</p> <p>All ingredients that make up this product are listed on the Canadian Domestic Substances List (DSL/LIS) and are approved for import and use in Canada.</p>
Other Classifications	<p>WHMIS (Canada) Not controlled under WHMIS (Canada).</p> <p>DSCL (EEC) Not controlled under DSCL (Europe).</p> <p>Japan: Not controlled under the Chemical Substance Control Law(MITI).</p> <p>Australia: Not controlled under the National Industrial Chemicals Notification and Assessment Act(NICNAS).</p>

Section 16. Other Information

HMIS (U.S.A.)	Health Hazard	0	National Fire Protection Association (U.S.A.) Health		Fire Hazard
	Fire Hazard	1			Reactivity
	Reactivity	0			Specific hazard
	Personal Protection	a			

References	Manufacturer's Information Database.
Other Special Considerations	<p>Mineral Oil mist(s) may develop when the product is misted. Exposure limits for such mist(s): OSHA PEL: 5.0 mg/m3 (8-hour TWA). ACGIH TLV: 5.0 mg/m3. ACGIH STEL: 10.0 mg/m3.</p> <p>The chlorinated paraffins that make up one of the ingredients of this product are long-chain chlorinated paraffins, those paraffins having an average chain length greater than C₁₈</p> <p>IP 346 DMSO Solvent Extractable Polycyclic Aromatic Hydrocarbons (PCA's, PAH's): Pass</p>

Validated by Manufacturer on 04/06/2009.	Verified by Company.
	Printed 04/06/2009.

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Emergency Response: Chemtrec: (800) 424-9300 (USA) or (703) 527-3887 If there are any questions regarding this MSDS, contact Hangsterfer's Laboratories. Phone: (856) 468-0216.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.