



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Name Nu-Calgon Wholesaler, Inc.	Phone Number (314) 469-7000 / (800) 554-5499	CHEMTREC (800) 424-9300		
Street Address 2008 Altom Court	City St. Louis	State MO	Postal Code 63146-4151	Last Update 1/08/07
Product Name Zerol 500	Product Number 4312	Product Use Refrigeration Oil		EPA Registration # N/A

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	% By Wt.	CAS Number	TLV	PEL
THIS PRODUCT IS CONSIDERED AS NON-HAZARDOUS (SEE SECTION 14).				

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: Clear yellow liquid, Odorless. HMIS Rating Health 1 ; Fire 1; Reactivity 0. Primary Route of Exposure: Skin.

Potential Health Effects

Eyes: Expected to cause no more than minor eye irritation. Application of a similar product into the eyes of rabbits produced very slight membrane irritation without corneal injury. Avoid eye contact as good industrial practice.

Skin: Not a primary skin irritant but may cause skin irritation on repeated or prolonged contact. Application of a similar product onto the skin of rabbits produced slight erythema and edema.

Ingestion: May cause nausea. Not expected to be acutely toxic by ingestion.

Inhalation: Avoid breathing vapor or mist. Under normal use conditions, this product is not an inhalation hazard. Prolonged exposure to vapors may cause dizziness and headaches.

Chronic Exposure: No Data.

Carcinogenicity: No Data.

Medical Conditions Aggravated by Exposure: There is no evidence that this product aggravates an existing medical condition.

SECTION 4 – FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding the eyelids open. If irritation persists, see a physician.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. Launder contaminated clothing. See a doctor if irritation persists.

Ingestion: If swallowed, call a physician immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. If medical advice cannot be obtained, take the person, product container and MSDS to the nearest medical emergency center.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration and seek medical attention immediately. Remove material from eyes, skin and clothing.

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: >150°C / >302°F

Autoignition Temp: >340°C/>644°F

Hazardous Products of Combustion: No Data.

Flammable Limits in Air: No Data.

Extinguishing Media: Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Fire and Explosion Hazards: None.

Special Firefighting Procedures: Wear full protective clothing and positive pressure breathing apparatus.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill or Leak: Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment: Minimum feasible handling temperatures should be maintained.

Storage Requirements: Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Eye Protection: Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Protective Clothing: Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates required. Exposed workers should wash exposed skin several times daily with soap and water. Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.

Exposure Guidelines: None established for product.

Specific Engineering Controls (such as ventilation, enclosed process): Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: liquid.	Freezing Point: Not determined°C/ °F	% Volatile by Weight: No Data.%
Color: Clear yellow	Vapor Density [air =1]: Not determined	Evaporation Rate: No Data.
Odor: Odorless	Vapor Pressure: Not determined	Specific Gravity: (water=1): .86 - .88
Boiling Point: > 300°C/>572°F	Solubility in Water: Negligible	pH (concentrate): No Data.

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable (thermal, light).

Hazardous Polymerization: Will not occur.

Incompatibilities: May react with strong oxidizing materials.

Reactive Conditions to avoid: No Data.

Decomposition Products: Normal combustion forms carbon dioxide and water vapor. Incomplete combustion can form carbon monoxide.

SECTION 11 – TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #	LD 50 of Ingredient (Specify Species)	LC50 of Ingredient (Specify Species)
Skin: (Draize) believed to be between 3-5 (rabbit) moderately irritating (maximum 8) Eyes: (Draize) believed to be < 15 (rabbit) no appreciable effect (maximum 110) Sensitization: Not determined			Oral: believed to be > 5 g/kg (rat) practically non-toxic Inhalation: Not determined Dermal: believed to be > 10 g/kg (rabbit) practically non-toxic	
Other: This product, or a component of this product, has been shown to damage red blood cells or blood forming organs, and has caused anemia in laboratory animals.				

SECTION 12 – ECOLOGICAL INFORMATION

Hazardous Ingredients	Aquatic Toxicity Data
	Biodegradability: Estimated to be less than 40% degradation over a test period of more than 28 days. Potential to Bioaccumulation: This product is estimated to have a very slow rate of bioaccumulation.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal: This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

SECTION 14 – TRANSPORTATION INFORMATION

Special Shipping Information: Not regulated

<u>Purview</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT (Land)	Not regulated			
IMO (Water)	Not regulated			
ICAO (Air)	Not regulated			

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification: (Workplace Hazardous Material Information System)	Not regulated by WHMIS.
SARA Title III: (Superfund Amendments & Reauthorization Act)	This product and/or its components are considered non-hazardous by the following standards: OSHA Hazard Comm. Standard Classification SARA Title III Section 311 Hazardous Categorization No chemicals subject to reporting per the following standards: SARA Title III Section 302/304 Extremely Hazardous Substances. SARA Title III Section 313 Toxic Chemical. California Prop. 65 States Right-to-Know Regulations. State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)
OSHA: (Occupational Safety & Health Administration)	No Data.
TSCA: (Toxic Substance Control Act)	This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.
VOC: (volatile Organic Compounds)	No Data.
CPR: (Canadian Controlled Products Regulations)	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.
EINECS: (European Inventory of Existing Commercial Chemical Substances)	This product, or its components, are listed on or are exempt from EINECS.
DSL / NDSL: (Canadian Domestic Substance List)(Non-Domestic Substance List)	This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).
CERCLA: (Comprehensive Response Compensation & Liability Act)	No chemicals subject to report.
IDL: (Canadian Ingredient Disclosure List)	No Data.
NFPA (HMIS) Rating: (Hazardous Materials Identification System)	No Data.

SECTION 16 – OTHER INFORMATION

Viscosity: 90 - 100 cSt at 40 °C.

The information contained herein is based on the data available to us and is believed to be correct. However, Nu-Calgon Wholesaler Inc. makes no warranty, expressed, or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. Nu-Calgon Wholesaler Inc. assumes no liability for injury from the use of the product described herein.