



Material Safety Data Sheet

OptiCool Fluid OptiCool-PH5 Fluid OptiCool-A Fluid OptiCool-H Fluid OptiCool 87252 Fluid

MANUFACTURER: DSI Ventures, Inc. 1320 Commerce St. Tyler, TX 75702 903-526-7577
Emergency Number CHEMTREC: 800-424-9300

PRODUCT IDENTIFICATION **Synonyms:** Synthetic Hydrocarbon Dielectric Heat Transfer Fluid
Chemical Family Hydrocarbon Oils – either PAO or Isoparaffin Oil

INGREDIENTS

CAS Registry No.	%W	%V	Identification	Carcinogen per NTP, IARC, OSHA
OptiCool-A and OptiCool 87252:				
68551-20-2	>90	>90	Synthetic Isoparaffin hydrocarbon	not listed
128-37-0	<10	<10	hindered phenol antioxidant	not listed
OptiCool-A and OptiCool 87252:				
68037-01-4	>90	>90	Synthetic Poly Alpha Olefin (PAO) hydrocarbon	not listed
128-37-0	<10	<10	hindered phenol antioxidant	not listed

PHYSICAL DATA

Boiling Point: wide range	Specific Gravity: 0.79-.81	Vapor Pressure: <0.001 psi @ 20 C.
Percent Solid by wt.: 0.0	pH: 7.0	Vapor Density (air = 1): 18
Solubility in water: very low	Percent Volatile (v/v): nil	Appearance: clear liquid

FIRE AND EXPLOSION DATA

ASTM D-92 Flash/Fire points, C.:

OptiCool Fluid	185
OptiCool-PH5 Fluid	151
OptiCool-A Fluid	131
OptiCool-H Fluid	147
OptiCool 87252 Fluid	160

Recommended fire extinguishing medium: Dry chemical or CO₂ foam. Use precautions as with any fire involving petroleum-based materials. Firefighters should wear apparatus with full face mask and full protective equipment.

REACTIVITY DATA

OptiCool fluids are stable under normal conditions of use. Products of complete combustion of OptiCool fluids are carbon dioxide and water. Products of incomplete combustion of any hydrocarbon product include these compounds plus volatile hydrocarbons and carbon monoxide.

HEALTH HAZARD DATA

Routes of Exposure:

ORAL: Rat oral LD50 >40 grams/Kg. Ingestion may cause gastrointestinal distress. Symptoms may include nausea, vomiting and diarrhea.

SKIN: Estimated rabbit dermal LD50 >50 grams/Kg. Repeated or prolonged contact may result in localized irritation of the skin. May cause allergic reactions in some individuals.

EYES: Slightly irritating. Avoid contact.

INHALATION: Inhalation of oil mist may cause respiratory irritation. Prolonged exposure may lead to respiratory problems.

SPECIAL TOXIC EFFECTS: None

CARCINOGENIC/MUTAGENIC POTENTIAL: Essentially none.

ENVIRONMENTAL HAZARDS May cause long-term adverse effects in the aquatic environment.

NFPA Hazard ID: Health: 0	Flammability: 1	Reactivity: 0
HMIS Hazard ID: Health: 0	Flammability: 1	Reactivity: 0

FIRST AID

INGESTION: Do not induce vomiting. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Wash area of contact thoroughly with soap and water. If irritation is present, get medical attention.

EYE CONTACT: Flush the eyes immediately with large amounts of water to ensure thorough rinsing. If irritation persists, get medical attention.

INHALATION: Remove affected person from source of exposure. Get medical attention if irritation persists.

PERSONAL PROTECTION INFORMATION

EYE PROTECTION: Wear safety glasses or goggles to prevent eye contact. Eye baths should be readily available in the area of handling OptiCool fluid.

SKIN PROTECTION: As with any hydrocarbon product, oil-impervious clothing is recommended to prevent skin contact.

RESPIRATORY PROTECTION: Use MSHA/NIOSH approved equipment when working in areas of heavy oil mist. Ventilation can be used to control or reduce airborne concentrations of oil.

ENVIROMENTAL AND DISPOSITION INFORMATION

SPILL OR RELEASE TO THE ENVIRONMENT: Combine and recover any free liquid. There is no CERCLA reportable quantity of OptiCool fluid. For technical advice, and assistance related to the spill, contact CHEMTREC (800-424-9300) and your local fire department. With small spills, absorb the fluid with sand or clay absorbent, and then flush the area with water. With large spills, contain its flow. A spill of any hydrocarbon fluid to navigable waters that causes a sheen upon the water's surface must be reported immediately to the Coast Guard National Response Center (800-424-8802). Failure to report may result in civil or criminal penalties.

WASTE DISPOSAL: OptiCool fluids, when discarded or disposed, are not listed as a hazardous waste per 40 CFR 261.33.

HANDLING AND STORAGE: Avoid extremes of temperature in storage. Store OptiCool fluids in tightly closed containers in cool, dry, isolated and well ventilated areas, away from sources of ignition or heat. Store drums on their sides so that bungs are below internal liquid level. Do not store in unlabeled containers.

This Material Safety Data Sheet has been prepared in order to help the users of DSI's OptiCool product line. The data contained herein is believed to be accurate, but no guarantees are given with regard to fitness of use in a particular situation.

Effective Date: November 1, 2012

Completed by David Sundin, Ph.D.