

MATERIAL SAFETY DATA SHEET

DYNALENE HT

SECTION 1: PRODUCT IDENTIFICATION

Material Identification

PRODUCT NAME: **DYNALENE HT** Heat Transfer Fluid
 CHEMICAL FAMILY: MIXTURE

Company Identification

MANUFACTURER	TELEPHONE NUMBERS
Dynalene Inc	Product Information: 610.262.9686
5250 West Coplay Road	Emergency Phone: CHEMTREC 800.424.9300
Whitehall, PA 18052	

Date of Preparation

November 9, 2005

Revision Date

January 31, 2011

SECTION 2: COMPOSITION /INFORMATION ON INGREDIENTS

<u>MATERIAL</u>	<u>CAS Number</u>	<u>Wt. %</u>	<u>OSHA PEL (TWA)</u>	<u>ACGIH TLV (TWA)</u>	<u>EU Classification</u>
Methyl bis-(phenylmethyl) benzene	26898-17-9	>98%	-----	-----	-----
Proprietary Compound	Proprietary	> 5%	-----	-----	-----

NE = Not Established C = Ceiling Level See Section 16 for Definitions of Terms Used.
 NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1993 format.

Compounds in this product are listed as proprietary; however, all pertinent hazard information has been provided in this MSDS, per requirements of the Federal OSHA Hazard Communication Standards (29 CFR 1910.1200) U.S. State equivalent standard, and requirements of the Canadian Workplace Hazardous Materials Information System.

SECTION 3: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Physical Appearance:

This product is a clear, colorless, to slightly yellow, with a slight hydrocarbon odor.

Immediate Concerns:

Mists from this product may be slightly irritating if inhaled. Irritation to eyes and upper respiratory

tract may occur with exposure to concentrated vapors. Irritation of eyes or skin may occur when in contact with product. This product is a negligible inhalation hazard due to its low volatile. Material may burn, but does not readily ignite.

Inhalation

Under normal use conditions, this product is not expected to pose an inhalation hazard. Exposure to high vapor concentrations may be irritating to the upper respiratory tract

Eyes

Exposure is not expected to cause significant irritation in the eyes

Skin

Skin absorption is not known to be a potential route of overexposure for the components of this product.

Ingestion

Ingestion of this product, while not likely in an industrial setting, may cause irritation of the mouth and throat, gastric upset and nausea and vomiting. Ingestion of large quantities may lead to discomfort, nausea and vomiting.

HAZARDOUS MATERIAL INFORMATION SYSTEM

	<u>HMIS</u>
HEALTH:	1
FLAMMABILITY:	1
REACTIVITY:	0

KEY: 4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal

SECTION 4: FIRST-AID MEASURES

Skin Exposure:

Immediately rinse with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician.

Eye Exposure:

Flush eyes with large amounts of water; until irritation subsides. If irritation persists, get medical attention.

Inhalation:

Using proper respiratory protection, immediately remove the affected victim from exposure. If breathing is difficult, give oxygen. Call for prompt medical attention.

Ingestion:

If the product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable properties

FLASH POINT: (PMCC)

200°C (392°F)

AUTOIGNITION:

450°C (842°F)

FLAMMABLE LIMITS:

Lower (LEL): Not Available

Upper (UEL): Not Available

HAZARDOUS COMBUSTION PRODUCTS: When involved in a fire, this material may decompose and produce-irritating vapors, toxic gases (e.g., oxides of carbon), soot and smoke.

Extinguishing Media:

Use foam, water spray (fog), or dry chemical or carbon dioxide (CO₂).

Fire-Fighting Instructions:

Cool exposed equipment with water spray until well after fire is out. Use full protective clothing and self-contained breathing apparatus (SCBA) if fighting fire.

NFPA Hazard Ratings

NFPA RATING

HEALTH: 1

FLAMMABILITY: 2

REACTIVITY: 0

KEY: 4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill and leak Response

In case of a spill, clear the affected area, protects people, and responds with trained personnel. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with and or earth. Absorb spilled liquid with polypads or other suitable absorbent materials. Decontaminate the area thoroughly. If necessary, decontaminate spill response equipment with soap and water solution. Place all spill residues in a suitable container and seal. Dispose of in accordance with Federal, State, and local hazardous waste disposal regulations (see Section 13, Disposal Considerations).

SECTION 7: HANDLING AND STORAGE

Storage and Handling Practices

Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. DO NOT handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight. Material will accumulate static charge; this may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Do NOT pressurize, cut, heat, or weld containers.

Electrostatic Accumulation Hazard

None expected

Storage/Transport Temperature

Ambient

Storage/ Transport Pressure

Ambient

Load/ Unload Temperature

Ambient

SECTION 8: EXPOSURE CONTROLS-PERSONAL PROTECTION

Engineering Controls

Mechanical ventilation may be necessary if working with the product in enclosed areas or at elevated temperatures.

Personal Protective Equipment

RESPIRATORY PROTECTION: None needed for normal circumstances of use. Maintain airborne contaminant concentrations below exposure limits listed in Section 2 (Composition and Information on Ingredients). If respiratory protection is needed, use only protection authorized in 29 CFR1910.134 or applicable State regulations. Use supplied air respiration protection if oxygen levels are below 19.5% or are unknown potential for overexposure.

EYE PROTECTION: Safety glasses with side shields or chemical goggles

HAND PROTECTION: Wear long sleeve and chemical resistant gloves.

BODY PROTECTION: Use body protection appropriate for task

PERSONAL PROTECTIVE EQUIPMENT LEVEL: C

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

RELATIVE VAPOR DENSITY (air = 1):	Lighter than air
EVAPORATION RATE (n-BuAc=1):	< 1.0
SPECIFIC GRAVITY @ 1 aym(Air = 1):	Not Applicable
MELTING POINT or RANGE:	-34°C (-29°F)
SOLUBILITY IN WATER:	Negligible
BOILING POINT:	390°C (734°F)
VAPOR PRESSURE, mm Hg @ 25°C:	< 1.0
VISCOSITY:	49 mPa s
ODOR:	Faint
PHYSICAL STATE:	Liquid
pH:	Not applicable.

SECTION 10: STABILITY AND REACTIVITY

DYNALENE HT MSDS

Chemical Stability

Material is chemically stable.

Decomposition

None expected.

Incompatibility with Other Materials

With strong oxidizers

Hazardous Polymerization

Will not occur

Conditions to Avoid

Not applicable.

SECTION 11: TOXICOLOGICAL INFORMATION

General Toxicity Information

EYES: Not irritating (OECD 405)

SKIN: Slightly irritant (OECD 404)

INGESTION: Oral LD₅₀ (Rat) > 2000mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate & Ecotoxicity Data**ECOTOXICOLOGICAL INFORMATION****Aquatic Toxicity Data**

EC₁₀ (Bacteria): >1 g/l 5 hr oxygen consumption test

EC₅₀ (Daphnia): 1.3 mg/l 48 Hr

EC₅₀ (Algae): 4.8 µl cell multiplication inhibition test.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: This product may be harmful to contaminated plant and animal life (especially if large quantities are released). Refer to Section 11 (Toxicological Information) for specified information regarding effects of this product's components on test animals.

EFFECT OF CHEMICAL ON AQUATIC LIFE: This product may be harmful to aquatic life if large quantities are released into bodies of water.

CHEMICAL FATE INFORMATION: 1% Sturmtest EC 92/69.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal

Waste disposal must be in accordance with appropriate Federal, State, and local regulations or those of Canada and its Provinces. EPA: This product meets the criteria for synthetic used oil under USEPA waste Oil Regulation (40 CFR 279). Recycle or burn in accordance with applicable state and local standards.

SECTION 14: TRANSPORTATION INFORMATION

Shipping Information

Proper Shipping Name:	Not Applicable.
Hazard Class Number and Description:	Not Applicable.
UN Identification Number	Not Applicable.
Packing Group	Not Applicable.
DOT label(s) Required	Not Applicable.

Marine Pollutant

No component of this product is classified as a Marine Pollutant, as listed in Appendix B to 49 CFR 172.101.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations**A: General Product Information**

OSHA: Non-Hazardous as defined by the OSHA Hazard Communication Standards.

B: Component Analysis

SARA SECTION 302 STATUS: Contains no chemicals subject to SARA 302 reporting.

SARA SECTION 313 CHEMICALS: Contains no chemicals subject to SARA 313 reporting.

TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.

CERCLA: Not Applicable.

CALIFORNIA: No component of this solution is on California Proposition 65.

C: Additional Canadian Regulations

CANADIAN WHMIS SYMBOLS: Not Applicable.

CANADA DSL/NDSL INVENTORY STATUS: The components of this product are either on the Canadian Domestic Substance Listing (DSL) or NDSL.

SECTION 16: OTHER INFORMATION

PREPARED BY:

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Whitehall, PA 18052
610-262 – 9686

Date of Printing:

January 31, 2011.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Dynalene Inc assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, Dynalene Inc assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.

DEFINITIONS OF TERMS

Key/Legend

ppm = parts per million; mg/m³ = milligrams per cubic meter of air; mppcf = million of particles per cubic foot of air; f/cc = fibers per cubic centimeter of air; OSHA = Occupational Safety and Health Administration; ACGIH = American Conference of Governmental Industrial Hygienists; TLV = Threshold Limit Value; TWA = 8-hour, time-weighted average; STEL = short-term exposure limit; EPA = Environmental Protection Agency; TSCA = Toxic Substances Control Act; DSL = Canada Domestic Substances List; EINECS = European Inventory of Existing Commercial Chemical Substances; ECL = Korea Existing and Evaluated Chemical Substances Inventory; ENCS = Japan Existing and New Chemical Substances Inventory; PICCS = Philippines Inventory of Chemicals Substances; AICS = Australia Inventory of Chemicals Substances; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; PMN = Premanufacture Notification; DSL = Domestic Substance List; NFPA = National Fire Protection Association; WHMIS = Workplace Hazardous Materials Identification System; HEPA = High Efficiency Particulate Air; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act; NJTSR = New Jersey Trade Secret Registry; EPCRA = Emergency Planning and Community Right-to-Know Act (SARA, Title III); 302 = Extremely Hazardous Substance; HAP = Clean Air Act Hazardous Air Pollutant; TPQ = Threshold Planning Quantity; RQ = Reportable Quantity; NA = Not Available; NR = Not Regulated