



**SECTION 1 – IDENTIFICATION**

<b>Product Name:</b> EchoTherm	<b>Manufacturer:</b> Echo Ultrasonics® LLC	<b>Australian Distributor:</b>
<b>Recommended Use:</b> Ultrasonic Couplant	774 Marine Drive, Bellingham, WA 98225	Russell Fraser Sales P/L
<b>Restrictions on Use:</b> For Industrial Use Only	360-671-9121 www.echoultrasonics.com	Unit 7, 38 Waratah St
<b>Operating Range:</b> 700°F to 1000°F (371°C to 538°C)	<b>Emergency:</b> 360-671-9121	Kirrawee NSW 2232
		Emergency: 02 9545 4433

**SECTION 2 – HAZARDS**

**Hazard Status:** Not hazardous by OSHA HazCom 2012 Criteria.  
**Color:** Off white  
**Physical State:** Light grease  
**Odor:** None

**Emergency Overview:** **Hazards: Eye:** May cause slight irritation.  
**Skin:** No adverse effects expected.

**Potential Health Hazards:** **Inhalation:** No adverse effects expected.  
**Ingestion:** No adverse effects expected.

**LABEL ELEMENTS ACCORDING TO OSHA HazCom 2012- NONE APPLICABLE**

**SECTION 3 – COMPOSITION/INGREDIENTS**

Component	CAS #	WT %
Perfluoropolyalkylether (PFPAE)	60164-51-4	>60%
Silicone Dioxide	7631-86-9	<5%
Polyaryletherketone	3164-16-3	<40%

**SECTION 4 – FIRST-AID MEASURES**

**General Information:** This product as such is not hazardous. Inhalation of thermal decomposition products which occur at temperatures over 750°F (400°C) at 1.5% / 24 hours are not expected to occur when this product is used in less than 20 grams per application in a ventilated area. For larger applications, see Personal Protection below.

	Symptoms/Effects	Treatment Recommendations
<b>Eyes:</b>	Irritation, discomfort	Flush with water holding eyelids apart. Get medical attention if irritation or other symptoms occur.
<b>Skin:</b>	None expected	Wash with soap and water.
<b>Inhalation:</b>	None expected below 750°F (400°C)	If exposed to excessive vapors above 750°F (400°C), remove to fresh air and get medical attention if cough or other symptoms develop.
<b>Ingestion:</b>	Low toxicity, unknown symptoms	Get medical attention if more than 1 oz. ingested by adult. Keep away from children and adults with dementia.

**SECTION 5 – FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Equipment:** Carbon oxidate, foam, water fog, dry chemical

**Specific Hazards from Combustion:** During a fire, smoke may contain thermal decomposition products including Hydrogen Fluoride (HF), which are toxic.

**Fire Fighting Procedures:** Fight fire from a safe distance and wear positive pressure self-contained breathing apparatus and protective clothing.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Spills may be slippery. Prevent entry into spill area by unauthorized persons.

**Emergency Procedures:** Sprinkle inert, non-slip absorbent material onto spill.  
Minimize entry of material into sewers and drainage systems.

**Containment Procedures:** Absorb spill with inert material (earth, clay, commercial absorbent for oil) then place into container for disposal.

**SECTION 7 – HANDLING AND STORAGE**

**Precautions:** Although this material does not present a significant skin or eye concern, skin and eye contact should be avoided as a general industrial practice. Gloves are not required, but may be desirable for repeated or long term contact. Wearing eye protection is recommended. Wash hands and contaminated skin after handling. Avoid breathing vapors from heated material above 750°F (400°C).

**Recommendations:** No special storage conditions are required.

**SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Permissible Exposure Limits:** None established

**Engineering Controls:** When used in a reduced ventilation area (or within a building) on a hot surface above 750°F (400°C), control fumes with local exhaust ventilation.

**Personal Protection:** **Eyes:** Use safety glasses if there is a possibility for exposure.  
**Skin:** Wear impervious heat insulated gloves when working with hot material.  
**Respiratory:** Above 800°F (426 °C) in restricted ventilation environments, use MIOSH/MSHA approved air purifying respirator as needed to control exposure to smoke or fumes generated during use. Consult with respirator manufacturer to determine respirator selection, use and limitations. Follow respiratory protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

**Special Requirements:** None

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Off white grease  
**Odor:** None  
**Odor Threshold:** No data  
**Solubility:** Insoluble in water  
**pH:** Neutral  
**Viscosity:** 12-13 mPa.s  
**Flammable Limits:** **Upper Explosive Limit:** N/A  
**Lower Explosive Limit:** N/A  
**Vapor Pressure:** <0.001 Torr at 25°C  
**Vapor Density:** >1  
**Specific Gravity:** 1.85 (water = 1)  
**Freezing Point:** -60°F (-15°C)  
**Flammability:** Nonflammable by WHMIS/OSHA/NOM-018-STPS 2000 Criteria  
**Partition Coefficient:** N/A  
**Auto-Ignition Temperature:** Greater than 1300°F (704°C)  
**Operating Range:** 700°F to 1000°F (371°C to 538°C)  
**Decomposition Temperature:** 1.3% per 24 hours at 750°F (400°C)

**SECTION 10 – STABILITY AND REACTIVITY**

**Reactivity:** Stable  
**Chemical Stability:** Stable  
**Potential Hazards, Conditions to Avoid:** In a fire or above the thermal decomposition temperature, fluorinated decomposition compounds (including Hydrogen Fluoride) are produced.  
**Incompatible Materials:** Relatively inert

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**Likely Routes of Exposure:** See section 2  
**Effects of Exposure:** See section 2; Dermal ALD > 17,000 mg/kg (rabbit), oral LD 50 > 30,000 mg/kg (rat)  
**Immediate:** See section 2  
**Delayed, Chronic, Symptoms:** No data  
**Carcinogenicity:** No data  
**Other:** This substance is not expected to product toxic effects below the thermal decomposition temperature.

**SECTION 12 – ECOLOGICAL INFORMATION**

**Toxicology Data:** Oncorhynchus mykis >1000 mg/liter  
**Environmental Persistence/Degradation:** Inert  
**Bioaccumulation Potential:** Non expected  
**Soil to Groundwater Motility:** No data  
**Other Adverse Effects:** No data

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**General Information:** Dispose in accordance with all federal, state, and local regulations.  
**Disposal Containers, Methods:** Landfill

**SECTION 14 – TRANSPORT INFORMATION**

**UN Number and Proper Shipping Name:** Not applicable  
**Transport Hazard Class:** Not hazardous  
**Packing Group:** Not applicable  
**Environmental Hazards:** Not applicable  
**Bulk Transport Guidance:** Not applicable  
**Special Precautions:** None; not classified as dangerous in the meaning of transport regulations.

**SECTION 15 – REGULATORY INFORMATION**

**Regulatory Information not Included Elsewhere:** **TSCA Inventory:** All ingredients listed or in compliance with the inventory  
**Section 311 SARA Title III/CERCLA Immediate (acute):** No  
**Fire Hazard:** No  
**Delayed (chronic):** No  
**Reactive:** No  
**Sudden Release of Pressure:** No  
 This product does not contain chemicals which require reporting, nor listing under California Proposition 65.

**SECTION 16 – OTHER INFORMATION**

**SDS Preparation Date:** 15 January 2015 - original  
**Last Revision:** 20 Jan 2016  
**Changes from Last Revision:** Compliance with GHS Guidelines  
**Other Information:**

*All information herein is provided in good faith and believed to be accurate and reliable. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ according to location. It is the buyer's/user's responsibility to ensure that this product is used in compliance with all federal, state, and local law and used as intended as an industrial nondestructive testing ultrasonic couplant.*