

SECTION 1: Identification of the substance/mixture and of the Manufacturer**Chemical Name:** C13-C16 Isoalkanes**Manufacturer Product Name:** EnviraTherm© Liquid inside Thermometer**Recommended uses of the chemical/product:** EnviraTherm© is the thermometric fluid in an EnviraTherm© filled glass thermometer. The EnviraTherm© liquid expands or contracts with change in temperature. The thermometer will have approximately 2 cc of liquid. The liquid is dyed with a purple aniline dye.**Manufacturer Details:**Miller-Weber of Texas
6952 Lawndale Street
Houston, TX 77023
713-926-2623 Fax: 713-926-7736**Emergency Telephone Number:**Chem-Tel, Inc. (Contract Number: MIS0003159)
1-800-255-3924**SECTION 2: Hazards Identification****GHS Classification:** Aspiration hazard, Category 1**Hazard Classification of the chemical (GHS-US Hazard Pictograms):**

GHS08

Signal word (GHS-US): Danger**Hazard statements (GHS-US):** H304 – May be fatal if swallowed and enters airways**Precautionary statements (GHS-US):** P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P331 – Do NOT induce vomiting
P405 - Store locked up
P501 - Dispose of contents/container to comply with applicable local, national and international regulation.**NFPA/HMIS Ratings (0-4) (Non-GHS):** Health: 1, Flammability: 1, Reactivity: 0, PPG: See Section 8 below.**SECTION 3: Composition/Information on Ingredients****Molecular formula:** UVCB

Name	Product Identifier	Weight %
C13-C16 Isoalkanes	CAS No. 68551-20-2	99-100

SECTION 4: First aid measures**The first aid measures described in this section are for exposure to C13-C16 Isoalkanes, regardless of the quantity of the substance involved in the exposure. The first aid measures below come from the Safety Data Sheets of our bulk chemical suppliers.****Description of first aid measures****General:** Move out of dangerous area. Show this SDS to the doctor in attendance. Symptoms of poisoning may appear several hours later. Do not leave the victim unattended.**After inhalation:** Move to fresh air. If unconscious place in a recovery position and seek medical advice. If symptoms persist, call a physician.**After skin contact:** If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.**After eye contact:** Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.**After swallowing (ingestion):** Keep respiratory tract clear. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.**Most important symptoms and effects, both acute and delayed****After inhalation:** Asphyxiation hazard.**After skin contact:** Skin irritation.**After eye contact:** Eye irritation.**After ingestion:** Do not induce vomiting. Nausea. Asphyxiation if entered respiratory tract.**Chronic symptoms:** No data available.**Indication of any immediate medical attention and special treatment needed**

No data available.

SECTION 5: Firefighting measures**Extinguishing media**

Suitable extinguishing agents: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical.

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture

Fire Hazard: Flash point is 100.6 °C per ASTM Method D93

Reactivity: No Data Available.

Advice to firefighters:

Firefighting instructions: Standard procedures for chemical fires. Use extinguishing measures that are appropriate for local circumstances and the surrounding environment.

Protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting, if necessary.

Hazardous decomposition products: Carbon oxides.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

General measures: If thermometer breaks, wipe up liquid with disposable wiping cloth. Allow to dry under a fume hood and discard or discard into spark and explosion proof waste receptacle.

Personal precautions: Use personal protective equipment. Ensure adequate ventilation.

Protective Equipment: As needed, gloves, safety goggles, respiratory protection, lightweight protective clothing.

Emergency procedures: Ventilate area.

Environmental precautions

Prevent product from entering drains. For large releases, prevent further leakage or spillage if safe to do so. If product contaminates rivers and lakes or drains inform respective authorities.

Methods and material for containment and cleaning up

Carefully clean up broken glass. Wipe up liquid immediately after putting on protective equipment.

Reference to other sections

No additional information available.

SECTION 7: Handling and storage**Precautions for safe handling**

Handle and store thermometer in such a way to prevent breakage. If thermometer breaks, liquid will be released. Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in case of breakage. Supply spark and explosion proof waste receptacle, as necessary.

Hygiene measures

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Store thermometer in such a way to prevent breakage. Store away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from materials incompatible with C13-C16 isoalkanes (see Section 10 of this SDS). Store in area that will secure the liquid if thermometer is broken in storage. Inspect all incoming containers with thermometers carefully for breakage. If breakage is suspected, use proper protective equipment (see Section 8 of this SDS) and containment. Store and handle in well ventilated areas.

SECTION 8: Exposure controls/personal protection**Control Parameters:****C13-C16 Isoalkanes (CAS No. 68551-20-2)**

Manufacturer of Chemical	TWA	400 ppm
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Appropriate Engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.

Personal Protective Equipment (if thermometer breaks)

If thermometer breaks, avoid all unnecessary exposure. Gloves. Protective clothing. Safety glasses or goggles. Respiratory protection if concentration in air is above the exposure limits. When using do not eat, drink or smoke. Wash hands before breaks and at the end of the workday.



Hand Protection: Gloves resistant to C13-C16 isoalkanes.

Eye Protection: Tightly fitting safety goggles. Eye wash bottle with pure water or eye wash fountain should be available.

Respiratory Protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Dusts and Mists / P100. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Skin and Body Protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate, lightweight protective clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color)	Purple dyed liquid	Explosion Limit (upper and lower)	Not Determined
Odor	mild	Vapor pressure	0.36 mm Hg at 37.8 °C
Odor threshold	Not Determined	Vapor density	1 (Air = 1.0)
pH value	7	Relative density	0.79 at 15.6 °C
Melting/Freezing point	Not Determined	Solubilities (at 25 °C)	Soluble in water: negligible
Boiling point/ Boiling range	214.4-316 °C	Partition coefficient (n-octanol/water)	Not Determined
Flash point (ASTM D93)	100.6 °C	Auto/Self-ignition temperature	Not Determined
Evaporation rate	<1	Decomposition temperature	Not Determined
Flammability (solid, gaseous)	Not Determined	Viscosity (kinematic)	3.3 cSt at 38 °C
Upper.Lower flammability limits	Not Determined	Viscosity (dynamic)	Not Determined

SECTION 10: Stability and reactivity

Reactivity: Nonreactive under normal conditions. If thermometer is broken, the liquid may react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Chemical stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions: No data available.

Conditions to avoid: No data available.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No data available.

Other data: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

Acute toxicity: **Oral (C13-C16 isoalkanes)** LD50: > 10,000 mg/kg – species: rat. Information given is based on data obtained from similar substances.

Inhalation (C13-C16 isoalkanes) LD50: > 5.2 mg/l – Exposure time: 4 h; Species: rat; Test atmosphere: dust/mist. Information given is based on data obtained from similar substances.

Dermal (C13-C16 isoalkanes) LD50: > 2,000 mg/kg – species: rabbit; Information given is based on data obtained from similar substances.

Skin corrosion/irritation: Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin. Information given is based on data obtained from similar substances. May degrease skin.

Serious eye damage/irritation: No eye irritation

Respiratory or skin sensitization: Classification: Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.

Aspiration toxicity: May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.

Germ cell mutagenicity: No data available.

Carcinogenicity: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP or ACGIH.

Reproductive toxicity: No data available.

Specific target organ toxicity- (single exposure): No data available.

Specific target organ toxicity- (repeated exposure): No data available.

See Section 4 of the SDS for most important symptoms and effects, both acute and delayed for inhalation, skin contact, eye contact, ingestion and chronic symptoms of C13-C16 isoalkanes exposure.

SECTION 12: Ecological information

Exotoxicity: no data available.

Persistence and degradability: C13-C16 isoalkanes are expected to be biodegradable. **This material is expected to be readily biodegradable.**

Bioaccumulative potential: no data available.

Mobility in soil: No additional information available.

Other adverse effects: no data available.

SECTION 13: Disposal considerations

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. In bulk, this material, if discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used containers. Send to a licensed waste management company.

Ecology – waste materials: Avoid release to the environment.

SECTION 14: Transport information

According to the manufacturer, C13-C16 isoalkanes, is not regulated as a hazardous material or dangerous goods for transportation by: US DOT, IMO/IMDG, IATA, ADR, RID or ADN.

SECTION 15: Regulatory information**United States (USA)**

SARA Section 302 (Threshold Planning Quantity): No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA Section 313 (Ingredients): This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act (Ozone-Depletion Potential): This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

Proposition 65 (California): This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

SECTION 16: Other information

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No previous publication of SDS by Miller-Weber of Texas