P3-5006 Galileo's Thermometer

Kerosene

1. Product Identification

Synonyms: Kerosene; Coal Oil; Fuel Oil No. 1; Range Oil
CAS No.: ç
Molecular Weight: 170 (approx.)
Chemical Formula: Mixture of Petroleum Hydrocarbons

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Kerosene	8008-20-6	90-100%	Yes

3. Hazards Identification

Emergency Overview

DANGER! HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. FLAMMABLE LIQUID AND VAPOR.

Health Rating: 1 - Slight
Flammability Rating: 2 - Moderate
Reactivity Rating: 1 - Slight
Contact Rating: 1 - Slight
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER Storage Color Code: Red (Flammable)

Potential Health Effects

Inhalation causes irritation to respiratory tract. Symptoms may include coughing.

4. First Aid Measures

Fire:

Flash point: 38C (100F) CC
Auto ignition temperature: 210C (410F)
Flammable limits in air % by
Volume: lel: 0.7; uel: 5.0
Flammable Liquid and Vapor! Contact with strong oxidizers may cause fire.

Explosion: Sealed containers may rupture when heated. Above the flash point, explosive vapor-air mixtures may be formed. Vapors can flow along surfaces to distant ignition source and flash back.

Fire Extinguishing Media: Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.

5. Fire Fighting Measures and Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as sawdust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

6. Handling and Storing

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

7. Exposure Controls/Personal Protection

Airborne Exposure Limits: -ACGIH Threshold Limit Value (TLV): 200 mg/m3 (TWA), (Application restricted to conditions in which there are negligible aerosol exposures). A4 – This is not classifiable as a human carcinogen. **Ventilation System:** In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered. **Personal Respirators (NIOSH Approved):** For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres. **Skin Protection:** Make sure to wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. **Eye Protection:** Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

8. Physical/Chemical Properties

Appearance: Pale yellow or water-white, mobile, oily liquid. **Odor:** Odorless. **Solubility:** Insoluble in water. **Density:** ca. 0.80 **pH:** No information found. **% Volatiles by volume @ 21C (70F):** No information found. **Boiling Point:** 175 - 325C (347 - 617F) **Melting Point:** No information found. **Vapor Density (Air=1):** 4.5 **Vapor Pressure (mm Hg):** 1 @ 20C (68F) **Evaporation Rate (BuAc=1):** No information found.

9. Stability and Reactivity Data

Stability: Stable under ordinary conditions of use and storage. **Hazardous Decomposition Products:** Carbon dioxide and carbon monoxide may form when heated to decomposition. **Hazardous Polymerization:** Will not occur. **Incompatibilities:** Strong oxidizers. **Conditions to Avoid:** Heat, flames, ignition sources and incompatibles.

10. Toxicological Information

Kerosene irritation data (std Draize): skin, rabbit, 500 mg, severe. Oral rat LD50: > 500 mg/kg. Investigated as a tumorigen and mutagen.

--------\Cancer Lists\----------

---NTP Carcinogen---

Ingredient Known Anticipated IARC Category

11. Ecological Information

Environmental Fate: When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material may evaporate to a moderate extent. When released into water, this material may biodegrade to a moderate extent. This material may cause bioaccumulation to some extent. When released into the air, this material may be moderately degraded by reaction with photo chemically produced hydroxyl radicals. **Environmental Toxicity:** No information found. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

12. MSDS Transport Information

Domestic (Land, D.O.T.) ----------

Proper Shipping Name: KEROSENE

Hazard Class: 3 **UN/NA:** UN1223 Packing Group: III

Information reported for product/size: 20L

International (Water, I.M.O.) ----------

Proper Shipping Name: KEROSENE **Hazard Class:** 3

UN/NA: UN1223 Packing Group: III

Information reported for product/size: 20L

International (Air, I.C.A.O.) ----------

Proper Shipping Name: KEROSENE

Hazard Class: 3 **UN/NA:** UN1223 Packing Group: III

Information reported for product/size: 20L

13. Regulatory Information

--------\Chemical Inventory Status - Part 1\----------

Ingredient TSCA EC Japan Australia

Kerosene (8008-20-6) Yes Yes No Yes

--------\Chemical Inventory Status - Part 2\----------

--Canada--

Ingredient Korea DSL NDSL Phil.

Kerosene (8008-20-6) Yes Yes No Yes

--------\Federal, State & International Regulations - Part 1\----------

-SARA 302- ------SARA 313----

Ingredient RQ TPQ List Chemical Catg.

Kerosene (8008-20-6) No No No No

--------\Federal, State & International Regulations - Part 2\----------

-RCRA- -TSCA-

Ingredient CERCLA 261.33 8(d)

Kerosene (8008-20-6) No No No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No

Reactivity: No (Pure / Liquid)

Australian Hazchem Code: 3[Y]E **Poison Schedule:** S5 **WHMIS:** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

14. Other Information

NFPA Ratings: Health: **1** Flammability: **2** Reactivity: **0 Label Hazard Warning:** DANGER! HARMFUL OR FATAL IF SWALLOWED. HARMFUL IF INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. FLAMMABLE LIQUID AND VAPOR. **Label Precautions:** Wash thoroughly after handling. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. **Label First Aid:** Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases, get medical attention. **Product Use:** Laboratory Reagent.