



Radiation Products Design, Inc.

5218 Barthel Industrial Drive

Albertville, MN 55301

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Phone: 800-497-2071 Fax: 763-497-2295

**RPD is an
authorized distributor**

RPD Product Information

Item Number Description

470-051	+ Room Thermometer -35 to 50 C., 12" Long Spirit Filled
470-121	+ Room Thermometer -30 to 120 F., 12" Long Spirit Filled
470-131	+ Room Thermometer -1 to 51 C., 18" Long Spirit Filled
470-206	+Pocket Thermometer -15 to 105 C., 6 1/2" Long Spirit Filled
470-207	+Pocket Thermometer +30 to 120 F., 6 1/2" Long Spirit Filled
470-215	+ Pocket Thermometer -30 to 120 F 6 1/2 Long Spirit Filled
470-260	+ Room Thermometer -50 to 50 C., 12" Long Spirit Filled
470-266	+ Room Thermometer -60 to 120 F., 12" Long Spirit Filled
878-153	+ Thermometer for Alloy Disp. 0 to 230 F 12" Long Organic Filled

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865



24 Hour Emergency Telephone 800-850-2151
CHEMTREC 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3087

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-592-2537) for assistance.

Kerosene, (Low Odor)

MSDS Number: K2175 --- Effective Date: 02/23/01

1. Product Identification

Synonyms: Kerosine; Coal Oil; Fuel Oil No. 1; Range Oil

CAS No.: 8008-20-6

Molecular Weight: 170 (approx.)

Chemical Formula: Mixture of Petroleum Hydrocarbons

Product Codes: P339

2. Composition/Information on Ingredients

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

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.**

J.T. Baker SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

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:

Inhalation causes irritation to respiratory tract. Symptoms may include coughing, shortness of breath, burning sensation in chest, headache, nausea, weakness, restlessness and incoordination, drowsiness and coma.

Ingestion:

Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea. A potential aspiration hazard if swallowed. May cause damage to the lungs. Symptoms may parallel inhalation exposure.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain. May cause dermatitis.

Eye Contact:

May cause severe irritation and pain.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

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.

Skin Contact:

Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:

Flash point: 38C (100F) CC

Autoignition temperature: 210C (410F)

Flammable limits in air % by volume:

l_{el}: 0.7; u_{el}: 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 facepiece operated in the pressure demand or other positive pressure mode.

6. 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 saw dust. 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.

J. T. Baker SOLUSORB(R) solvent adsorbent is recommended for spills of this product.

7. Handling and Storage

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.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

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, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

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.

9. Physical and 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.

10. Stability and Reactivity

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.

11. Toxicological Information

Kerosene irritation data (std Draize): skin, rabbit, 500 mg, severe.
Investigated as a tumorigen and mutagen.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC
	Known	Anticipated	
Kerosene (8008-20-6)	No	No	No

12. 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 bioaccumulate to some extent. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals.

Environmental Toxicity:

No information found.

13. Disposal Considerations

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.

14. 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: 3.3
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

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----
Ingredient TSCA EC Japan A

-----\Chemical Inventory Status - Part 2\-----				
Ingredient			--Canada--	
		Korea	DSL	NDSL
Kerosene (8008-20-6)		Yes	Yes	No

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA	
	RQ	TPQ	List	Chemi
Kerosene (8008-20-6)	No	No	No	

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSC
		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.

16. 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.

Revision Information:

No changes.

Disclaimer:

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