



MSDS MATERIAL SAFETY DATA SHEET

HI-VALLEY CHEMICAL INC. \ LAB SUPPLY
 • 1134 WEST 850 NORTH CENTERVILLE, UTAH 84014 •
 (801) 295-9591 • www.hvchemical.com

Kerosene

1. === Product Identification ===

Synonyms: Kerosine; 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:

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 ===

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.

5. === Fire Fighting 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.

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.

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:

-ACGIH Threshold Limit Value (TLV):

200 mg/m³ (TWA), (Application restricted to conditions in which there are negligible aerosol exposures). A4 - 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-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/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 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.

11. === Toxicological Information ===

Kerosene irritation data (std Draize): skin, rabbit, 500 mg, severe.

Oral rat LD50: > 500 mg/kg.

Investigated as a tumorigen and mutagen.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Kerosene (8008-20-6)	No	No	None

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. === 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

15. === 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\-----

Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Kerosene (8008-20-6)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Kerosene (8008-20-6)	No	No	No	No

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

[High Valley Products, Inc.](#)

provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

HIGH VALLEY PRODUCTS, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, HIGH VALLEY PRODUCTS, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

Revision Date 1/17/08