Material Safety Data Sheet (MSDS)
Kerosene

Section 1  Product Identification

Common Name:  Kerosene
MSDS:  280-286
Emergency:  INFOTRAC:  1-800-535-5053
Supplier:  Guttman Oil Company  Product information:  Guttman Oil Company
200 Speers St.  (724) 483-3533
Belle Vernon, PA 15012
Synonym:  Kerosene, K-1, No. 1 Diesel, No. 1 Heating Oil
Red Dye may be added to non-taxable fuel.
Chemical name:  Kerosene
Chemical Family:  Petroleum Hydrocarbon Mixture
Chemical Formula:  Hydrocarbon Mixture

Section 2  Product/Ingredients

COMPOSITION/INFORMATION ON INGREDIENTS:
The criteria for listing components in the composition section is as follows: Carcinogens are listed when
present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when
present at 1.0% or greater; non-hazardous components are listed at 3.0% or greater. This is not intended to
be a complete compositional disclosure. Refer to section 14 for product and/or component(s) carcinogenic
according to:

OSHA  IARC  NTP  OTHER  NONE
____  ____  ____  ____  X

Composition:  (Sequence Number and Chemical Name)
Seq. Chemical Name  CAS Number  Range in %
01  *  Kerosene  8008-20-6  100.00

PRODUCT IS HAZARDOUS ACCORDING TO OSHA (1910.1200)
COMPONENT IS HAZARDOUS ACCORDING TO OSHA
Exposure limits referenced by sequence number in the composition section
Seq.  Limit
01  100 ppm TWA-TEXACO

Section 3  Hazard Identification

Emergency Overview:
Appearance: Bright and clear liquid. Pink liquid if dyed.
Odor: Petroleum odor

WARNING STATEMENT:
CAUTION! MAY CAUSE DIZZINESS AND DROWSINESS
MAY CAUSE EYE IRRITATION
ASPIRATION HAZARD IF SWALLOWED –
CAN ENTER LUNGS AND CAUSE DAMAGE
COMBUSTIBLE LIQUID AND VAPOR
USE ONLY AS A FUEL

HMIS:
Health: 1  Reactivity: 0  Health: 1  Reactivity: 0
Flammability: 2  Special: -  Flammability: 2  Special: -

Potential Health Effect:

Primary Route of Exposure:  EYE  SKIN  INHALATION  INGESTION

EFFECTS OF OVEREXPOSURE:

ACUTE:
Eyes: May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye.

Skin: Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects. Prolonged, widespread, or repeated skin contact may result in the absorption of potentially harmful amounts of material.

Inhalation: Vapors or mist may cause irritation of the nose and throat. Inhalation may cause dizziness, drowsiness, euphoria, loss of coordination, disorientation, headache, nausea, and vomiting. In poorly ventilated areas or confined spaces, unconsciousness and asphyxiation may result. Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

Ingestion: If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Aspiration may occur during swallowing or vomiting resulting in lung damage.

Sensitization Properties: Unknown.

CHRONIC:
Repeated skin contact may cause a persistent irritation or dermatitis.

Medical Conditions Aggravated by Exposure: because of its irritating properties, repeated skin contact may aggravate an existing dermatitis (skin condition).

Other Remarks: None

Section 4 First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

Skin: Wash skin with plenty of soap and water until all traces of material are removed. Remove and clean contaminated clothing (See other instructions). Destroy non-resistant footwear. Get medical attention if skin irritation persists or contact has been prolonged.

Ingestion: If person is conscious and can swallow, give two glasses of water (16 oz.) but do not induce vomiting. If vomiting occurs, give fluids again. Have medical personnel determine if evacuation of stomach or induction of vomiting is necessary. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation: If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Other Instructions: Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry-cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.

Aspiration of this product during induced emesis may result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a poison center for additional treatment information.

Section 5 Fire Fighting Measures

Ignition Temperature – ALT (degree F): 480

Flash Point (degrees F): 125 (CC)

Flammable Limits (%): Lower = .5; Upper = 4.4

Recommended Fire Extinguishing Agents and Special Procedures: Use water spray, dry chemical, foam or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers.

Unusual or Explosive Hazards: None

Extinguishing Media Which Must Not Be Used: Not determined

Special Protective Equipment for Fire Fighters: Wear full protective clothing and positive pressure breathing apparatus.
Section 6  Accidental Release Measures
(Transportation Spills: CHEMTREC – 800-424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage: Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

Section 7  Handling and Storage

Precautions to be Taken in Handling: Eye wash and safety shower should be available nearby when this product is handled or used.

Storage: Store away from heat and open flame. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

Section 8  Exposure Control/Personal Protection

Protective Equipment (Type):

Eye/Face Protection: Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Skin Protection: Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates required. The use of Nitrile protective materials is recommended.

Respiratory Protection: Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation: Local exhaust ventilation recommended if generating vapor, dusts, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate.

Exposure Limit for Total Product: None established for product. For hydrocarbons: TEXACO TWA 100 ppm.

Section 9  Physical and Chemical Properties

Appearance: Bright and clear liquid

Odor: Petroleum odor
Boiling Point (degrees F):  515
Melting/Freezing point (degrees F):  Not applicable
Specific Gravity (water=1):  .816
PH of undiluted product:  Not applicable.
Vapor Pressure:  < 7 mmHg.
Viscosity:  1.2 cSt at 37.7 C
VOC Content:  Not determined.
Vapor Density (air=1):  Not determined.
Solubility in Water (%):  Not determined.
Other – None.

Section 10  Stability and Reactivity

This Material Reacts Violently With (If Others is checked below, see comments for details):

Air  Water  Heat  Strong Oxidizers  Others  None of These
  __  __  __  ___ X  ___  ___

Comments: None
Product Evolved When Subjected to Heat or Combustion: Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones.

Hazardous Polymerization’s: NO NOT OCCUR

Section 11  Toxicological Information

Toxicological Information (Animal Toxicity Data):

Meridian Lethal Dose.

Oral: LD50 Similar product > 5.00 g/kg (rat) practically non-toxic.

Inhalation: Not determined.

Dermal: LD50 Similar product > 2.00 g/kg (rabbit) practically non-toxic.

Irritation Index, Estimation of Irritation (Species)

Skin: (Draize) Similar product > .50 – 3.00 / 8.0 (rabbit) slightly irritating.

Eyes: (Draize) Similar product > 15.00 – 25.00 / 110 (rabbit) slightly irritating
Sensitization: Not determined.

Other: Middle distillates have caused skin irritation and skin cancer in laboratory animals when repeatedly applied and left in place between application. Studies to further evaluate the carcinogenic potential of middle distillates are currently underway. Kidney damage has also been observed in laboratory animals exposed to middle distillates.

Section 12 Disposal Considerations

Waste Disposal Methods: This product (as presently constituted) has the RCRA characteristics of ignitability, and, if discarded in its present form, would have the hazardous waste number of D001. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may change the classification to non-hazardous, or hazardous for reasons other than, or in addition to ignitability.

Remarks: This product is potentially biodegradable.

Section 13 Transport Information

Transportation:

DOT:
Proper Shipping Name: Kerosene
Hazard Class: Combustible liquid (See 49CFR 172.101(d)(4))
Identification Number: UN 1223
Packing Group: III
Label Required: None
Marine Pollutant: Not applicable

IMDG:
Proper Shipping Name: Not evaluated.

ICAO:
Proper Shipping Name: Not evaluated.

TDG:
Proper Shipping Name: Not evaluated.

Section 14 Regulatory Information

Federal Regulations:

SARA Title III: Section 302/304 Extremely Hazardous Substances

Seq. TPQ RQ

_____ _______ _____
Section 311 Hazardous Categorization:

Acute  Chronic  Fire  Pressure  Reactive  N/A
X          X

Section 313 Toxic Chemical

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
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<tbody>
<tr>
<td>None</td>
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</table>

CERCLA/DOT Hazardous Substances (Sequence Numbers and RQ’s):

Seq.  RQ
None  __________

TSCA Inventory Status: This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Other: None.

State Regulations:

California Proposition 65: The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
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</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
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</table>

International Regulations:

WHMIS Classification: Not determined.

Canada Inventory Status: This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL)

EINECS Inventory Status: This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS).

Australian Inventory Status: This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

Japan Inventory Status: This product, or its components, are listed on or are exempt from the Japanese Ministry of International Trade and Industry (MITI) inventory.

Section 15 Environmental Information

Aquatic Toxicity: Not determined.
Mobility: Not determined.

Persistence and Biodegradability: Not determined.

Potential to Bioaccumulate: Not determined.

Remarks: None

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Section 16 Other Information

DO NOT USE THIS PRODUCT IN SPRAY APPLICATIONS. THIS PRODUCT IS INTENDED FOR USE AS A FUEL ONLY.

It is recommended that all exposures to this product be minimized by strictly adhering to recommend occupational controls procedures to avoid any potential adverse health effects.

THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT DATA. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, YOU SHOULD CONSULT WITH YOUR LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY.

PRODUCT LABEL

READ AND UNDERSTAND MATERIAL DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT. THIS LABEL COMPLIES WITH THE REQUIREMENTS OF THE OSHA HAZARD LABEL IS NOT INTENDED TO BE USED WITH PACKAGING INTENDED FOR SALE TO CONSUMERS AND MAY NOT CONFORM WITH THE REQUIREMENTS OF THE CONSUME PRODUCT SAFETY ACT OR OTHER RELATED REGULATORY REQUIREMENTS.

205, 210, 280, 281, 285, KEROSENE, DIESEL FUEL NO. 1

WARNING STATEMENT:

CAUTION! MAY CAUSE DIZZINESS AND DROWSINESS
MAY CAUSE EYE IRRITATION
ASPIRATION HAZARD IF SWALLOWED
CAN ENTER LUNGS AND CAUSE DAMAGE
COMBUSTIBLE LIQUID AND VAPOR
USE ONLY AS A FUEL

PRECAUTIONARY MEASURES

Use only with adequate ventilation.
Keep away from heat and flame.
Avoid breathing vapor, mist, or gas.
Avoid contact with eyes.
Keep container closed.
Never siphon by mouth.
Wash thoroughly after handling.

FIRST AID:

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

Skin Contact: Wash skin with plenty of soap and water until all traces of material are removed. Remove and clean contaminated clothing (See other instructions). Destroy non-resistant footwear. Get medical attention if skin irritation persists or contact has been prolonged.

Ingestion: If person is conscious and can swallow, give two glasses of water (16 oz.) but do not induce vomiting. If vomiting occurs, give fluids again. Have medical personnel determine if evacuation of stomach or induction of vomiting is necessary. Do not give anything by mouth to an unconscious or convulsing person.

Inhalation: If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

Note to Physician: Aspiration of this product during induced emesis may result in sever lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a poison center for additional treatment information.

FIRE:

In case of fire, use water spray, dry chemical, foam or carbon dioxide. Water may cause frothing. Use water spray to cool fire-exposed containers.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Range in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Kerosene</td>
<td>8008-20-6</td>
<td>100.00</td>
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PRODUCT IS HAZARDOUS ACCORDING TO OSHA (1910.1200).
• COMPONENT IS HAZARDOUS ACCORDING TO OSHA

<table>
<thead>
<tr>
<th>Pennsylvania Special Hazardous Substance(s)</th>
<th>CAS Number</th>
<th>Range in %</th>
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<tbody>
<tr>
<td>None</td>
<td></td>
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</table>

HMIS  |  Health: 1 | Reactivity: 0 | Flammability: 2 | Special: - |
NFPA  |  Health: 1 | Reactivity: 0 | Flammability: 2 | Special: - |

TRANSPORATION:

DOT:
Proper Shipping Name: Kerosene
Hazard Class: Combustible liquid (See 49CFR 172.101 (d) (4))
Identification Number: UN 1223
Packing Group: III
CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

Guttman Oil Company
200 Speers St.
Belle Vernon, PA 15012

Transportation Emergency INFOTRAC 1-800-535-5053
Health Emergency INFOTRAC 1-800-535-5053

Issue Date: 7/1/05

Disclaimer of Expressed and Implied Warranties:
The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT. THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.