

Material Safety Data Sheet

1. MATERIAL AND COMPANY IDENTIFICATION

Material Name : Super S K-1 Kerosene
Uses : Kerosene Fuel

Manufacturer/Supplier : Smitty's Supply, Inc.
PO Box 530
Roseland, LA 70456
USA

MSDS Request : 985-748-9687

Emergency Telephone Number : 800-424-9300 – toll free in the U.S., Canada, and U. S. Virgin Islands.
(CHEMTREC) 703-527-3887 – for calls originating elsewhere.
(Collect calls accepted)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name (CAS No.)	Concentration percent by weight
Kerosene (8008-20-6)	100
Naphthalene (91-20-3)	Typically 0.04
A complex combination of hydrocarbons including naphthenes, paraffins, and aromatics.	

3. HAZARDS IDENTIFICATION

Appearance and Odour	: Pale yellow to water-white liquid. Characteristic petroleum distillate odor.
Health Hazards	: Not classified as dangerous for supply or conveyance.
Safety Hazards	: Classified as flammable.
Environmental Hazards	: Not classified as dangerous for the environment.

Health Hazards : Not expected to be a health hazard when used under normal conditions.

Health Hazards Inhalation : Excessive exposure may cause irritation to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

Skin Contact : May cause skin irritation with prolonged or repeated contact. Practically non-toxic if absorbed following acute (single) exposure. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Eye contact : Contact with eyes may cause mild to moderate irritation.

Ingestion : The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death. Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication.

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Warning : In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur
 : The burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death

Chronic Effects and Carcinogenicity : Similar products produced skin cancer and systematic toxicity in laboratory animals following repeated applications. The significance of these results to human exposures has not been determined – see Section 11 Toxicological Information.

Aggravated Medical Condition : Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash).

4. FIRST AID MEASURES

General Information : Not expected to be a health hazard when used under normal conditions.
Eye Contact : In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 minutes. Hold eyelids open to ensure adequate flushing. Seek medical attention.
Skin Contact : Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water to waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.
Ingestion : DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.
Inhalation : Remove person to fresh air. If person is not breathing provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES**FLAMMABLE PROPERTIES:**

FLASH POINT : >100F (38C) TCC
 AUTOIGNITION POINT : 410F (210C)
 OSHA/NFPA FLAMMABILITY CLASS : 2 (COMBUSTIBLE) (see Section 14 for transportation classification)
 LOWER EXPLOSIVE LIMIT (%) : 0.7
 UPPER EXPLOSIVE LIMIT (%) : 5.0

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- FIRE AND EXPLOSION HAZARDS** : Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard
- EXTINGUISHING MEDIA**
- SMALL FIRES** : Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray, fire fighting foam, or Halon.
- LARGE FIRES** : Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.
- FIRE FIGHTING INSTRUCTIONS** : Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA-approved pressure-demand self-contained breathing apparatus with full face piece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. See Section 16 for the NFPA 704 Hazard Rating.

6. ACCIDENTAL RELEASE MEASURES

- Activate Facility's Spill Contingency or Emergency Response Plan** : Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact. Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection. Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal- caution, flammable vapors may accumulate in closed containers. Resonse and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

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7. HANDLING AND STORAGE

- Handling Precautions** : Handle as a combustible liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion. Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) See API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents".
- Storage Precautions** : Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".
- Work/Hygienic Practices** : Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use gasoline or solvents (naphtha, kerosene, etc.) for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**Exposure Limits**

Components (CAS No.)	Source	TWA/STEL	Note
Kerosene (8008-20-6)	OSHA	5 mg/m ³ as mineral oil mist	A3
	ACGIH	100 mg/m ³ TWA	
Naphthalene (91-20-3)	OSHA	10 ppm	A4
	ACGIH	10 ppm TWA/ 15 ppm STEL	

- Exposure Controls** : Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.
- Eye/Face Protection** : Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.
- Skin Protection** : Gloves constructed of nitrile, neoprene, or PVC are recommended. Chemical protective clothing such as E.I. DuPont Tyvek QC, Saranex,

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TyChem or equivalent recommended based on degree of exposure.

Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

Respiratory Protection : A NIOSH/MSHA – approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection. Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Work/Hygienic Practices : Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use gasoline or solvents (naphtha, kerosene, etc.) for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical Properties : Boiling Range: 300 to 580F (149 to 304C)
Vapor Pressure: 0.4mm Hg@ 68F (20C)
Vapor Density (air = 1): AP 4.5
Specific Gravity (H2O =1): 0.79 – 0.85
Percent Volatiles: 100%
Evaporation Rate: Slow; varies with conditions
Solubility (H2O): Negligible

10. STABILITY AND REACTIVITY

Stability : Stable. Hazardous polymerization will not occur.
Conditions to Avoid and Incompatible Materials : Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers such as nitric and sulfuric acids.
Hazardous Decomposition Products : Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

11. TOXICOLOGICAL PROPERTIES

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Acute Toxicity : Acute dermal LD50 (rabbits): >2g/kg
Acute oral LD50 (rats): >5 g/kg
Primary dermal irritation: moderate irritant (rabbits)
Primary eye irritation: slightly irritating (rabbits)
Guinea pig sensitization: negative

Chronic Effects & Carcinogenicity : Carcinogenicity: OSHA : NO
IARC : NO
NTP : NO
ACGIH : 1997
NOIC : A3
Dermal carcinogenicity: positive (mice)
Studies have shown that similar products produce skin cancer or skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation

12. ECOLOGICAL INFORMATION

Keep out of sewers, drainage and waterways. Report spills and releases, as applicable, under Federal and State regulations.

13. DISPOSAL CONSIDERATIONS

Consult federal, state and local waste regulations to determine appropriate disposal options.

14. TRANSPORTATION INFORMATION

Dot Proper Shipping Name : Kerosene
Dot Hazard Class and Packing Group : 3, PG III
Dot Identification Number : UN 1223
Dot Shipping Label : Flammable Liquid
May be reclassified for transportation as a COMBUSTIBLE LIQUID under conditions of DOT 49 CFR 173.120(b)(2).

15. REGULATORY INFORMATION

U.S. Federal, State & Local Regulatory Information : This product and its constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility/operation.

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- Clean Water Act (Oil Spills)** : Any spill or release of this product to “navigable waters” (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) or, if not practical, the U.S. Coast Guard with follow-up to the National Response Center, as required by the U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.
- Cercla Section 103 & SARA Section 304 (Release to the Environment)** : The CERCLA definition of hazardous substances contains a “petroleum exclusion” clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.
- Sara Section 311/312 Hazard Class** : Acute Health - X
Chronic Health - X
Fire – X
Sudden Release of Pressure - --
Reactive - ---
- Sara Section 313 Supplier Notification** : This product may contain listed chemicals below the de minimis levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right-To-Know-Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

Canadian Regulatory Information (WHMIS)

Class B, Division 3 (Combustible Liquid) Class D, Division 2, Subdivision B (Toxic by other means)

California Proposition 65 List of Chemicals

This product contains the following chemicals that are included on the Proposition 65 “List of Chemicals” required by the California Safe Drinking Water and Toxic Enforcement Act of 1986:

Ingredient Name (CAS Number)
Naphthalene

Date Listed
04/19/2002

16. OTHER INFORMATION**NFPA Hazard Rating**

Health : 0
Fire : 2
Reactivity : 0

Refer to NJPA 704 “Identification of the Fire Hazards of Materials” for further information.

HMIS Hazard Rating

Health : 1* Slight
Fire : 2 Moderate
Physical : 0 Negligible
*Chronic

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- MSDS Revisions** : A vertical bar (|) in the left margin indicates an amendment from the previous version.
- MSDS Regulation** : The content and format of this MSDS is in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- MSDS Distribution** : The information in this document should be made available to all who may handle the product.
- Disclaimer** : The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.

