SAFETY DATA SHEET

Klean Strip Green Denatured Alcohol

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Klean Strip Green Denatured Alcohol

Company Name: W. M. Barr Phone Number:

2105 Channel Avenue (901)775-0100

Memphis, TN 38113

Web site address: www.wmbarr.com

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346 **Information:** W.M. Barr Customer Service (800)398-3892

Intended Use: Cleans glass and is used as a fuel for marine stoves

Synonyms: QKGA75003

Additional Information This product is regulated by the United States Consumer Product Safety Commission

and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to

using the product.

2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 2

Acute Toxicity: Inhalation, Category 4

Serious Eye Damage/Eye Irritation, Category 2A

Specific Target Organ Toxicity (single exposure), Category 1







GHS Signal Word: Danger

GHS Hazard Phrases: H225: Highly flammable liquid and vapor.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H370: Causes damage to organs.

GHS Precaution Phrases: P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P260: Do not breathe gas/mist/vapors/spray. P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases: P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P307+311: IF exposed: Call a POISON CENTER or doctor/physician. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P337+313: If eye irritation persists, get medical advice/attention.

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P370+378: In case of fire, use dry chemical powder to extinguish.

GHS Storage and Disposal

P403+235: Store in cool/well-ventilated place.

Phrases:

P405: Store locked up.

P501: Dispose of contents/container according to local, state and federal regulations.

Hazard Rating System:





HMIS:

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

Inhalation Acute Exposure Effects:

Vapor harmful. May cause dizziness, headache, watering of eyes, irritation of respiratory tract, irritation to the eyes, drowsiness, nausea, other central nervous system effects, spotted vision, dilation of pupils, and convulsions.

Skin Contact Acute Exposure Effects:

May cause irritation, drying of skin, redness, and dermatitis. May cause symptoms listed under inhalation. May be absorbed through damaged skin.

Eye Contact Acute Exposure Effects:

May cause irritation.

Ingestion Acute Exposure Effects:

Poison. Cannot be made non-poisonous. May be fatal or cause blindness. May produce fluid in the lungs and pulmonary edema. May cause dizziness, headache, nausea, drowsiness, loss of coordination, stupor, reddening of face and or neck, liver, kidney and heart damage, coma, and death. May produce symptoms listed under inhalation. Prolonged ingestion may cause liver damage, "fetal-alcohol syndrome" in pregnant females and neuronal degeneration.

Chronic Exposure Effects:

May cause symptoms listed under inhalation, dizziness, fatigue, tremors, permanent central nervous system changes, blindness, pancreatic damage, and death.

Medical Conditions Generally Diseases of the liver.

Aggravated By Exposure:

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Hazardous Components (Chemical Name)	Concentration	RTECS#
64-17-5	Ethyl alcohol {Ethanol}	80.0 -90.0 %	KQ6300000
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	< 5.0 %	PC1400000
141-78-6	Acetic acid, ethyl ester {Ethyl acetate}	1.5 %	AH5425000

Additional Chemical

Specific percentage of composition is being withheld as a trade secret.

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4. FIRST AID MEASURES

Emergency and First Aid

Procedures:

Inhalation:

If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or

artificial respiration until medical assistance can be rendered.

Skin Contact:

Wash with soap and water while removing contaminated clothing. If symptoms persist

seek medical advice.

Eye Contact:

Flush with large quantities of water for at least 15 minutes. Get medical attention.

Ingestion:

Call your poison control center, hospital emergency room or physician immediately for

instructions to induce vomiting.

Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person.

Signs and Symptoms Of

Exposure:

Unconsciousness. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin).

Decrease in

motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Proteinuria.

Birth

defects. Sterility.

Note to Physician: Poison. This product contains methanol. Methanol is metabolized to formaldehyde and

formic acid. These metabolites may cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic

pathway and has been used as an antidote. Methanol is effectively removed by hemodialysis. Call your local poison control center for further instructions.

5. FIRE FIGHTING MEASURES

OSHA Class IB

Flash Pt: 55.00 F Method Used: Unknown Explosive Limits: LEL: 3.3 % UEL: 19%

Autoignition Pt: 685.00 F

Suitable Extinguishing Media: Use carbon dioxide, dry powder, alcohol-resistant foam, or water spray.

Unsuitable Extinguishing

Media:

Do not use water jet as an extinguisher

Fire Fighting Instructions: Self-contained respiratory protection should be provided for fire fighters fighting fires in

buildings or confined area. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have

been exposed to intense heat or flame.

Flammable Properties and

Hazards:

Flashback of vapors possible over considerable distance.

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6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case

Material Is Released Or Spilled: Clean-up:

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources, keep flares, smoking or flames out of hazard area.

Small spills:

Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable.

Large spills:

Dike far ahead of spill for later disposal.

Do not flush into surface water or sanitary sewer system.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:

Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container.

Precautions To Be Taken in Storing:

Keep container tightly closed when not in use. Store in a cool, dry place. Do not store

near flames or at elevated temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
64-17-5	Ethyl alcohol {Ethanol}	PEL: 1000 ppm	TLV: 1000 ppm	No data.
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	PEL: 200 ppm	TLV: 200 ppm STEL: 250 ppm	No data.
141-78-6	Acetic acid, ethyl ester {Ethyl acetate}	PEL: 400 ppm	TLV: 400 ppm	No data.

Respiratory Equipment

(Specify Type):

For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding

appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent

vapors. A dust mask does not provide protection against vapors.

Eye Protection: Safety glasses, chemical goggles or face shields are recommended to safeguard against

potential eye contact, irritation, or injury. Contact lenses should not be worn while

working with chemicals.

Protective Gloves: Wear impermeable gloves. Gloves contaminated with product should be discarded.

Promptly remove clothing that becomes soiled with product.

Other Protective Clothing: Various application methods can dictate the use of additional protective safety

equipment, such as impermeable aprons, etc., to minimize exposure.

Engineering Controls

(Ventilation etc.):

Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or

eye-watering -- Stop -- ventilation is inadequate. Leave area immediately.

Work/Hygienic/Maintenance

Practices:

A source of clean water should be available in the work area for flushing eyes and skin.

Do not eat, drink, or smoke in the work area.

Wash hands thoroughly after use.

Before reuse, thoroughly clean any clothing or protective equipment that has been

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contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

9	PHYSI	ICAL AND (CHEMICAL	_ PROPERTII	FS
•		OAL AILD			-

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Clear, water white, thin liquid

Melting Point:No data.Boiling Point:174.20 FAutoignition Pt:685.00 F

Flash Pt: 55.00 F Method Used: Unknown Explosive Limits: LEL: 3.3 % UEL: 19%

Specific Gravity (Water = 1): 0.789 - 0.83 at 60.0 F

Bulk density: 6.75 LB/GA

Vapor Pressure (vs. Air or ~ 44 MM HG at 20.0 C

mm Hg):

Vapor Density (vs. Air = 1): ~ 1.6

Evaporation Rate: ~ 2 (BuAC=1)
Solubility in Water: miscible

Solubility Notes: Completely soluble in water.

Percent Volatile: 100.0 % by weight. VOC / Volume: 789.0000 G/L

10. STABILITY AND REACTIVITY

Stability: Unstable [] Stable [X]

Conditions To Avoid - Heat, flames and sparks. Avoid temperatures exceeding the flash point.

Instability:

Incompatibility - Materials To Incompatible with strong oxidizing agents.

Avoid:

Hazardous Decomposition Or Decomposition may produce carbon monoxide, carbon dioxide, and possibly other

Byproducts: unidentified organic compounds.

Possibility of Hazardous Will occur [] Will not occur [X]

Reactions:

Conditions To Avoid - No data available.

Hazardous Reactions:

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11. TOXICOLOGICAL INFORMATION

Toxicological Information: This product has not been tested as a whole. Refer to section 2 for acute and chronic

health effects. CAS# 141-78-6:

Standard Draize Test, Eyes, Human, 400.0 PPM.

Result:

Liver: Hepatitis (hepatocellular necrosis), zonal.

- Journal of Industrial Hygiene and Toxicology, Vol/p/yr: 25,282, 1943

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
64-17-5	Ethyl alcohol {Ethanol}	n.a.	1	A4	n.a.
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	n.a.	n.a.	n.a.	n.a.
141-78-6	Acetic acid, ethyl ester {Ethyl acetate}	n.a.	n.a.	n.a.	n.a.

12. ECOLOGICAL INFORMATION

General Ecological

This product has not been tested as a whole.

Information:

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with applicable local, state, and federal regulations.

Waste Disposal Method: D001

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Ethyl alcohol

DOT Hazard Class: 3 FLAMMABLE LIQUID

UN/NA Number: UN1170 Packing Group: II



MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Same as land.

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Same as land.

Additional Transport The supplier may apply one of the following exceptions: Combustible Liquid, Consumer

Information: Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others,

as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to

ensure that subsequent shipments comply with these exceptions.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
64-17-5	Ethyl alcohol {Ethanol}	No	No	No
67-56-1	Methanol {Methyl alcohol; Carbinol; Wood alcohol}	No	Yes 5000 LB	Yes
141-78-6	Acetic acid, ethyl ester {Ethyl acetate}	No	Yes 5000 LB	No

This material meets the EPA [X] Yes [] No Acute (immediate) Health Hazard **'Hazard Categories' defined** [X] Yes [] No Chronic (delayed) Health Hazard

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for SARA Title III Sections [X] Yes [] No Fire Hazard

311/312 as indicated: [] Yes [X] No Sudden Release of Pressure Hazard

[] Yes [X] No Reactive Hazard

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists

64-17-5 Ethyl alcohol {Ethanol} CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes-

Inventory; CA PROP.65: No

67-56-1 Methanol {Methyl alcohol; Carbinol; Wood CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes -

Inventory; CA PROP.65: Yes

141-78-6 Acetic acid, ethyl ester {Ethyl acetate} CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -

Inventory, 4 Test; CA PROP.65: No

Regulatory Information

All components of this material are listed on the TSCA Inventory or are exempt.

Statement:

16. OTHER INFORMATION

Revision Date: 04/22/2015

Preparer Name: W.M. Barr EHS Department (901)775-0100

Additional Information About No data available.

This Product:

Company Policy or

Disclaimer:

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.