SAFETY DATA SHEET

Klean-Strip Green Muriatic Acid

Revision: 07/28/2020
Supersedes Revision: 05/20/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Klean-Strip Green Muriatic Acid

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

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

Product Code: GKGM75006, GKGM75006W, GKGM75006CAN

2. HAZARDS IDENTIFICATION

Corrosive To Metals, Category 1
Acute Toxicity: Inhalation, Category 3
Skin Corrosion/Irritation, Category 1C
Serious Eye Damage/Eye Irritation, Category 1
Specific Target Organ Toxicity (single exposure), Category 3

GHS Signal Word: **Danger**

GHS Hazard Phrases:
May be corrosive to metals.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Toxic if inhaled.
May cause respiratory irritation.

GHS Precautionary Phrases:
Keep only in original container.
Do not breathe {gas/mist/vapors/spray}.
Wash {hands} thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear {protective gloves/protective clothing/eye protection/face protection}.

GHS Response Phrases:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment {see label}
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

GHS Storage and Disposal Phrases:
Store container tightly closed in well-ventilated place.
Store locked up.
Dispose of contents/container according to local, state and federal regulations.

Potential Health Effects (Acute and Chronic): **See above.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
7647-01-0	Hydrochloric acid {Hydrogen chloride}	10.0 -30.0 %

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

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. Obtain medical attention immediately.

Skin Contact:
Wash with soap and large quantities of water and remove contaminated clothing, jewelry, and shoes immediately. Wash for 15 minutes. If irritation persists, seek medical attention.

Eye Contact:
Immediately begin to flush with large quantities of water, remove any contact lens. Continue to flush with water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all of the eye and lid tissues. Flushing the eyes with water within several seconds is essential to achieve maximum effectiveness. Seek immediate medical attention.

Ingestion:
Do not induce vomiting. Give milk of magnesia or large amounts of water. Never give anything by mouth to an unconscious person. Call your poison control center, hospital emergency room or physician immediately for instructions. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops.

Signs and Symptoms Of Exposure: See Potential Health Effects.

Note to Physician: Call your local poison control center for further information.

5. FIRE FIGHTING MEASURES

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire.

Fire Fighting Instructions: Keep unnecessary people away, isolate hazard area and deny entry. Wear NIOSH approved positive -pressure self-contained breathing apparatus. 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. Move containers from fire if it can be done without risk.

Flammable Properties and Hazards: Non-flammable.

Hazardous Combustion Products: Hydrogen chloride

May release toxic gases.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Small Spills:
Keep unnecessary people away and isolate hazard area. Wear appropriate personal protective equipment. Take up liquid with sand, earth or other noncombustible absorbent material and place in a plastic container where applicable. Material may be neutralized with baking soda, soda ash, or dilute caustic soda. Stay upwind, out of low areas, and ventilate closed spaces before entering.

Large Spills:
Evacuation of surrounding area may be necessary for large spills. Wear appropriate personal protective equipment. Completely contain spilled material with dikes, sandbags, etc. Shut off ventilation system if needed. Reprocess or reuse if possible. Neutralize with soda ash or dilute caustic soda. Collect with appropriate absorbent and place into suitable container. Keep out of sewers and water supplies. This material is acidic and may lower the pH of the surface waters with low buffering capacity.

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.

Avoid breathing vapor or mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

When mixing, slowly add acid to water to minimize heat generation and spattering. Never add water to acid.

Keep container tightly closed when not in use. Keep container properly labeled.

Precautions To Be Taken in Storing:

Keep container tightly closed when not in use. Store in a cool, dry place away from direct sunlight and heat to avoid container deterioration. Avoid storage at extreme high or low temperatures. Protect from freezing. Keep container properly labeled. Keep separated from incompatible substances.

Store in acid-resistant plastic, glass containers, or rubber-lined steel containers. Do not store in aluminum containers or use aluminum fittings or transfer lines.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
7647-01-0	Hydrochloric acid {Hydrogen chloride}	ACGIH TLV	CEIL: 2 ppm)	
		OSHA PELs	CEIL: 5 ppm	

Respiratory Equipment (Specify Type):

Where vapor concentration exceeds or is likely to exceed applicable exposure limits, a NIOSH approved respirator with acid gas cartridges is required. When an air-purifying respirator is not adequate or for spills and/or emergencies of unknown concentrations, a NIOSH approved self-contained breathing apparatus or airline respirator with full-face piece is required. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

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 consumer use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator. A dust mask does not provide protection against vapors.

Eye Protection:

Safety glasses with side shields. Wearing chemical goggles with a face shield is recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn.

Provide an emergency eyewash station or quick drench shower in the immediate work area.

Protective Gloves:

Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with products.

Other Protective Clothing:

Wear chemical resistant clothing and rubber boots when potential for contact with the material exists.

Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure.

Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes.

Engineering Controls (Ventilation etc.):

Use closed system when possible. Provide local exhaust ventilation where vapor or mist may be generated. Ensure compliance with applicable exposure limits.

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, burning sensations, 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 of eyes and skin.

Wash hands thoroughly after use and before eating, drinking, or smoking. Do not eat, drink, or smoke in the work area. Discard any clothing or other protective equipment that cannot be decontaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	water white, free and clear potential slight pungent odor
pH:	< 1
Melting Point:	-59.00 C
Boiling Point:	108.00 C
Flash Pt:	No data.
Evaporation Rate:	< 1
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	0.2 MM HG
Vapor Density (vs. Air = 1):	> 1
Specific Gravity (Water = 1):	1.092 - 1.097
Density:	9.09 LB/GA
Solubility in Water:	100 %
Octanol/Water Partition Coefficient:	No data.
Percent Volatile:	100.0 % by weight.
Autoignition Pt:	No data.
Decomposition Temperature:	No data.
Viscosity:	No data.

10. STABILITY AND REACTIVITY

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	No data available.
Incompatibility - Materials To Avoid:	Incompatible with strong oxidizing agents, strong caustics, alkalis and alkali metals, mercuric sulfate, perchloric acid, carbides of calcium, cesium, rubidium, acetylides of cesium and rubidium, phosphides of calcium and uranium, lithium silicide, cyanides (which may produce lethal concentrations of hydrocyanic acid), and common and active metals (which produce flammable hydrogen gas).
Hazardous Decomposition or Byproducts:	Thermal decomposition may produce hydrogen chloride vapors and toxic gases.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information: Refer to section 2 for acute and chronic effects.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7647-01-0	Hydrochloric acid {Hydrogen chloride}	n.a.	3	A4	n.a.

12. ECOLOGICAL INFORMATION

General Ecological Information: This product has not been tested as a whole.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: UN1789, Hydrochloric Acid, 8, PGIII, LTD. QTY.
DOT Hazard Class:
UN/NA Number:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: UN1789, Hydrochloric Acid, 8, PGIII, LTD. QTY.
UN Number: **Packing Group:**
Hazard Class:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: UN1789, Hydrochloric Acid, 8, PGIII
UN Number: **Packing Group:**
Hazard Class:

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)
7647-01-0	Hydrochloric acid {Hydrogen chloride}	Yes 500 LB	Yes 5000 LB	Yes

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7647-01-0	Hydrochloric acid {Hydrogen chloride}	CAA HAP,ODC: HAP: NvHAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

16. OTHER INFORMATION

Revision Date: 07/28/2020
Preparer Name: W.M. Barr EHS Department (901)775-0100

Additional Information About This Product: 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.

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.