HEALTH *	1	Flammability Instability
FLAMMABILITY	0	
PHYSICAL	0	Health
PPE	х	Special Hazard

Printed: 12/16/2011 Revision: 12/16/2011 Supercedes Revision: 11/15/2011

1. Product and Company Identification

Product Code:	234.3		
Product Name:	Klean Strip TSP Substitute		
Manufacturer Information			
Company Name:	W. M. Barr		
	2105 Channel Avenue		
	Memphis, TN 38113		
Phone Number:	(901)775-0100		
Emergency Contact:	3E 24 Hour Emergency Contact	(800)451-8346	
Information:	W.M. Barr Customer Service	(800)398-3892	
Web site address:	www.wmbarr.com		
Preparer Name:	W.M. Barr EHS Dept	(901)775-0100	

Synonyms

QKTP94348, QKTP06, QKTP02B

2. Hazards Identification

GHS Classification

No data available.

GHS Hazard Phrases

No data available.

GHS Precaution Phrases

No data available.

GHS Response Phrases

No data available.

GHS Storage and Disposal Phrases

No data available.

Emergency Overview

Danger. May cause burns to eys. Skin irritant. Harmful if swallowed.

Potential Health Effects (Acute and Chronic)

INHALATION ACUTE EXPOSURE EFFECTS:

May cause dizziness; headache; irritation of the upper respiratory tract; Effects on animals have been reported to include the blood (hemolysis) and secondary effects on the kidney and liver.

SKIN CONTACT ACUTE EXPOSURE EFFECTS:

May cause irritation, itching, redness; swelling; inflammation; discomfort or pain. May cause more severe effects on covered skin.

EYE CONTACT ACUTE EXPOSURE EFFECTS:

This material is an eye irritant. May cause irritation; redness and swelling of the conjunctiva; excess blinking and tear production.

INGESTION ACUTE EXPOSURE EFFECTS:

Moderately toxic if ingested. Small amounts swallowed incidentally are not likely to cause injury, however, larger amounts may cause injury. Animal effects are seen on the blood, kidney and liver. Ingestion of significant

quantities may result in red blood cell hemolysis, central nervous system and kidney effects.

CHRONIC EXPOSURE EFFECTS:

Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. May cause skin irritation; liver damage; kidney damage; blood disorders; eye irritation. Prolonged skin contact may cause redness; swelling and possible skin destruction.

Medical Conditions Generally Aggravated By Exposure

No data available.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

3. Composition/Information on Ingredients

На	zardous Components (Chemical Name)	CAS #	Concentration
1.	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl	111-76-2	1.0 -5.0 %
	ether, (a glycol ether)}		

4. First Aid Measures

Emergency and First Aid Procedures

Skin:

Remove contaminated clothing. Immediately wash skin thoroughly with large amounts of water and mild soap, if available. Seek medical attention if irritation develops or persists.

Eyes:

Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes. Seek medical attention.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Ingestion:

If swallowed, do NOT induce vomiting. Seek immediate medical attention. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Signs and Symptoms Of Exposure

See Potential Health Effects.

Routes of Entry: Inhalation, Skin

5. Fire Fighting Measures

Flash	Pt:
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Explosive Limits:

Autoignition Pt: No data available.

No data.

LEL: No data.

Fire Fighting Instructions

Use NIOSH/MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

UEL: No data.

Flammable Properties and Hazards

Flashpoint: No flash to boiling. Will not burn.

Hazardous Combustion Products

Carbon dioxide, carbon monoxide

Suitable Extinguishing Media

Carbon dioxide, dry powder, or foam.

Unsuitable Extinguishing Media

None known.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Isolate the immediate area. Prevent unauthorized entry. Eliminate all sources of ignition in area and downwind of the spill area. Stay upwind, out of low areas, and ventilate closed spaces before entering. All equipment used when handling this product must be grounded or non-sparking. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to compatible containers. For large spills, dike ahead of the spill.

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

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl	111-76-2	50 ppm	20 ppm	No data.

ether, (a glycol ether)} **Respiratory Equipment (Specify Type)**

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

If the work area is not properly ventilated to keep airborne levels below their exposure limits, you must use a properly fitted and maintained NIOSH approved respirator for organic 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

Nitrile, neoprene, natural rubber

Other Protective Clothing

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

Engineering Controls (Ventilation etc.)

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Use only with adequate ventilation to prevent buildup of vapors. Do not use in areas where vapors can accumulate and concentrate, such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain 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 and move to fresh air.

Work/Hygienic/Maintenance Practices

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			
Melting Point:	~ 32 F			
Boiling Point:	~ 210 F			
Autoignition Pt:	No data.			
Flash Pt:	No data.			
Specific Gravity (Water = 1):	No data.			
Density:	8.565 LB/GL			
Vapor Pressure (vs. Air or mm Hg):	> 1 MM HG			
Vapor Density (vs. Air = 1):	No data.			
Evaporation Rate:	< 1			
Solubility in Water:	Complete			
Percent Volatile:	98 % by weight.			
VOC / Volume:	1.4 % WT			
pH:	12.25 - 13.0			
Appearance and Odor				
Blue, Free and Clear				
	10. Stability and Reactivity			
Stability:	Unstable [] Stable [X]			
Conditions To Avoid - Instability				
No data available.				
Incompatibility - Materials To Avoid				
Strong oxidizers and acids.				
Hazardous Decomposition Or Byproducts				
Carbon dioxide and carbon mono	oxide			

Carbon dioxide and carbon monoxide

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

Conditions To Avoid - Hazardous Reactions

No data available.

11. Toxicological Information

2-Butoxyethanol: ACUTE TOXICITY: LD50 Rat oral 470 - 3,000 mg/kg LD50 Rabbit oral 0.32 g/kg LD50 Rabbit dermal 400 mg/kg LC50 Rat (male) inhalation 486 ppm/4 hr SKIN CORROSION / IRRITATION: This chemical has moderate acute toxicity and it is irritating to the eyes and skin. SERIOUS EYE DAMAGE / IRRITATION: May cause severe irritation and corneal injury. RESPIRATORY OR SKIN SENSITIZATION: It is not a skin sensitizer. ASPIRATION HAZARD: No data.

OSHA No

MUTAGENIC DATA: Although the results of in vitro tests for mutagenicity of 2-butoxyethanol were inconsistent, the absence of structural alerts and the negative findings from in vivo studies indicate that 2-butoxyethanol is not mutagenic.

IMMUNOTOXICITY: No data.

NEUROTOXICITY: No data.

DEVELOPMENTAL/REPRODUCTIVE: In animals, adverse effects on reproduction and development have not been observed at less than toxic doses. Did not cause birth defects in laboratory animals.

CARCINOGEN STATUS: No reliable human epidemiological studies are available that address the potential carcinogenicity. Confirmed animal carcinogen with unknown relevance to humans.

ADDITIONAL INFORMATION: In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

Massive ingestion may produce metabolic acidosis and subsequent secondary effects such as hemolysis, central nervous system and kidney effects.

Chronic Toxicological Effects

No data available.

Carcinogenicity/Other Information

IARC 3: Not Classifiable as to Carcinogenicity in Humans.

ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH
1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl	111-76-2	Possible	3	A3

	'	,	•	,	0,	
ether,	(a glyco	l eth	ner)]	}		

12. Ecological Information

2-Butoxyethanol:

Toxicity: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested).

LC50, rainbow trout, 96 hr, 1,700 mg/L

LC50, water flea, 835 mg/L

LC50, bacteria, >1,000 mg/L

Persistence and Degradability: Material is readily biodegradable.

Bioaccumulative Potential: Bioconcentration potential is low (BCF <100 or LOG POW <3).

Mobility in Soil: Potential for mobility in soil is high (KOC between 50 and 150).

Other Adverse Effects: No data.

13. Disposal Considerations

Waste Disposal Method

Dispose of in accordance with local, state, and federal laws.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name

Compound Cleaning Liquid

Additional Transport Information

For D.O.T. information, contact W.M. Barr Technical Services at 1-800-398-3892.

The shipper / supplier may apply one of the following exceptions: Combustible Liquid, Consumer 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

US EPA SARA Title III

 Hazardous Components (Chemical Name) 1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} US EPA CAA, CWA, TSCA 	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
	111-76-2	No	No	Yes-Cat. N230	No
 Hazardous Components (Chemical Name) 1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} 	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
	111-76-2	HAP, ODC ()	No	Inventory	No

EPA Hazard Categories:

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[X] Yes [] No	Acute (immediate) Health Hazard
[X] Yes [] No	Chronic (delayed) Health Hazard
[] Yes [X] No	Fire Hazard
[] Yes [X] No	Sudden Release of Pressure Hazard
[] Yes [X] No	Reactive Hazard

16. Other Information

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.