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MATERIAL SAFETY DATA SHEET Goof Off Heavy Duty

HEALTH	1	Flammability
FLAMMABILITY	1	
PHYSICAL HAZ.	0	Health
PPE	X	ribaiur y

Printed: 05/25/2010 Revision: 04/13/2010

1. Product and Company Identification

Product Code:	2465.1D
Product Name:	Goof Off Heavy Duty
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
Intended Use:	Multi-Purpose Remover for grease, tar, ink, paint, adhesive, etc.
Company Name: Phone Number: Emergency Contact: Information: Web site address: Preparer Name:	2105 Channel Avenue Memphis, TN 38113 (901)775-0100 3E 24 Hour Emergency Contact (800)451-8346 W.M. Barr Customer Service (800)398-3892 www.wmbarr.com W.M. Barr EHS Dept (901)775-0100

Synonyms

FG659, FG659MT, FG659WS, FG701, FG701CS, FG708, FG720, FG720D, FG721, FG728

2. Hazards Identification

GHS Precaution Phrases

Avoid breathing mist/vapors/spray. Wash hands thoroughly after handling.

Emergency Overview

CAUTION: Eye Irritant.

OSHA Regulatory Status:

This material is classified as hazardous under OSHA regulations.

Health Hazards (Acute and Chronic)

This material has not been tested as a whole for health effects. Effects listed are those of the individually listed ingredients in this msds.

Eyes:

May cause irritation. May cause moderate corneal injury. Effects may include discomfort or pain, and redness. Effects may be slow to heal.

Skin:

Brief contact may cause slight skin irritation with local redness. Repeated exposure may cause irritation, even a burn. May cause more severe response on covered skin (under clothing, gloves).

Inhalation:

When used as directed, the consumer is not expected to experience any exposure effects. Excessive exposure may cause irritation to the upper respiratory tract. Symptoms may include a headache, dizziness, or nausea.

Ingestion:

Moderately toxic if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury. However, swallowing larger amounts may cause injury.

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Target Organs: Blood (Hemolysis), Kidneys, Liver, Central Nervous System.

Primary Routes of Entry: Inhalation, Ingestion

Signs and Symptoms Of Exposure

See Potential Health Effects.

Medical Conditions Generally Aggravated By Exposure

None known.

Composition/Information on Ingredients

Ha	zardous Components (Chemical Name)	CAS #	Concentration
1.	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	3.0 -7.0 %
2.	Benzenemethanol {Benzyl alcohol}	100-51-6	5.0 -10.0 %
3.	Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	112-34-5	1.0 -5.0 %
4.	Propylene glycol phenyl ether {(not 313)}	770-35-4	1.0 -5.0 %
		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.

5. Fire Fighting Measures

Flammability Classification:	Not flammable or combustible		
Flash Pt:	> 200.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)		
Explosive Limits:	LEL: none UEL: none		
Special Fire Fighting Procedures			

Material is not flammable or combustible. No special fire fighting instructions required.

Unusual Fire and Explosion Hazards

No data available.

Hazardous Combustion Products

Material should not burn. Combustion product will be from surrounding materials involved in fire.

Suitable Extinguishing Media

Non-combustible liquid - use extinguishing media for underlying cause of fire.

Unsuitable Extinguishing Media

None known.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Prevent entry into waterways, sewers, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to compatible containers for proper disposal. For large spills, dike ahead of the spill.

7. Handling and Storage

Precautions To Be Taken in Handling

Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. A source of clean water should be kept in the immediate work area for flushing of the eyes and skin.

Follow all MSDS/label precautions even after container is emptied because they may retain product residues. **Precautions To Be Taken in Storing**

Keep containers closed when not in use. Store in a cool, dry place, out of direct sunlight.

8. Exposure Controls/Personal Protection

н	azardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1.	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	111-76-2	50 ppm	20 ppm	No data.
2.	Benzenemethanol {Benzyl alcohol}	100-51-6	No data.	No data.	No data.
3.	Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)}	112-34-5	No data.	No data.	No data.
4.	Propylene glycol phenyl ether {(not 313)}	770-35-4	No data.	No data.	No data.

Respiratory Equipment (Specify Type)

When used by the consumer following directions for use and with adequate ventilation, respiratory protection is not expected to be needed.

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

Where contact with the eyes or face is likely from spraying or splashing, safety glasses, a faceshield or chemical goggles should be worn to prevent eye contact.

Protective Gloves

When used as directed, protective gloves should not be required. For prolonged or repeated contact, wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as natural rubber or nitrile rubber provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information.

Other Protective Clothing

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

Ventilation

Ventilation is normally not required when handling or using this product to keep exposure to airborne contaminants below the exposure limit.

Good general ventilation should be sufficient to control airborne levels.

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

9. 1	Physical and Chemical Properties					
Physical States:	[]Gas [X]Liquid []Solid					
Melting Point:	28.00 F					
Boiling Point:	212.00 F					
Autoignition Pt:	No data.					
Flash Pt:	> 200.00 F Method Used: Setaflash Closed Cup (Rapid Setaflash)					
Explosive Limits:	LEL: none UEL: none					
Specific Gravity (Water = 1):	0.995					
Density:	8.277 LB/GL					
Bulk density:	No data.					
Vapor Pressure (vs. Air or mm Hg):	< 0.1 MM HG					
Vapor Density (vs. Air = 1):	>1					
Evaporation Rate (vs Butyl	<1					
Acetate=1):						
Solubility in Water:	Complete					
Percent Volatile:	~ 87 % by weight.					
VOC / Volume:	4.0000 % WT					
Heat Value:	No data.					
Particle Size:	No data.					
Corrosion Rate:	No data.					
pH:	8.3 - 9					
Appearance and Odor						
Slight yellow to clear, transparen	t, almond-like odor.					
	10. Stability and Reactivity					
Stability:	Unstable [] Stable [X]					
Conditions To Avoid - Instability						
None known.						
Incompatibility - Materials To Avoid						
Strong oxidizing agents, isocyana	ates, acetaldehyde, aluminum alkyl compounds and strong mineral acids.					
Hazardous Decomposition Or Bypro	ducts					
Carbon monoxide, carbon dioxid	e					
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]					
Conditions To Avoid - Hazardous Re	eactions					
None known.						
	11. Toxicological Information					
Material has not been tested as a whole. Data is for individual ingredients.						
Acute Toxicity:						
2-Butoxyethanol:						
LD50 Rat oral 1.48 g/kg	LD50 Rat oral 1.48 g/kg					
LD50 Rabbit oral 0.32 g/kg						
LD50 Rabbit dermal 400 mg/kg						
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LC50 Rat (male) inhalation 486 ppm/4 hr /from table/ LC50 Mouse inhalation 700 ppm/7 hr /from table/

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LD50 Rabbit (male) iv 280 mg/kg /from table/

Benzyl Alcohol: LD50 Rat oral 3.1 g/kg LD50 Rabbit oral 1.94 g/kg LC50 Rat inhalation 1000 ppm/8 hr

Diethylene Glycol Monobutyl Ether: LD50 Mouse oral 2400 mg/kg bw LD50 Rat oral 4500 mg/kg bw LD50 Rabbit dermal 2700 mg/kg bw

Skin Corrosion/Irritation: 2-Butoxyethanol is irritating to the eyes, the skin and the respiratory tract.

Diethylene Glycol Monobutyl Ether: When humans were patch tested with undiluted material, a limited number of the volunteers developed reddening of the skin. The substance is not corrosive to the skin, eyes, or respiratory tract.

Serious Eye Damage/Irritation:

Studies have shown that undiluted benzyl alcohol was moderately irritating when applied to the depilated skin of guinea pigs for 24 hr. It was moderately irritating when applied to rabbit skin. Benzyl alcohol was severely irritating to the eyes of rabbits.

Respiratory or Skin Sensitization: No Data Available.

Aspiration Hazard: No Data available.

Chronic Toxicological Effects

Material has not been tested as a whole. Data is for individual ingredients.

Germ Cell Mutagenicity:

2-Butoxyethanol: In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative.

Reproductive Toxicity/Birth Defects/Developmental Effects:

2-Butoxyethanol: In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

STOT-Single Exposure: No data available.

STOT-Repeated Exposure: No data available.

Carcinogenicity/Other Information

No data available.

н	azardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
1.	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl	111-76-2	Possible	2B	A3	No
	ether, (a glycol ether)}					

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Ha	zardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
2.	Benzenemethanol {Benzyl alcohol}	100-51-6	n.a.	n.a.	n.a.	n.a.
3.	Diethylene glycol monobutyl ether	112-34-5	n.a.	n.a.	n.a.	n.a.
	{2-(2-Butoxyethoxy)ethanol {(a glycol ether)}					
4.	Propylene glycol phenyl ether {(not 313)}	770-35-4	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

Not determined for this product as a whole.

Toxicity:

2-Butoxyethanol: Material is moderately toxic to aquatic organisms on an acute basis. LC50 Rainbow trout, 96 hr, 1,700 mg/L; LC50, water flea daphnia magna, 835 mg/L; EC50, Green Alga, biomass growth inhibition, 72 hr, 911 mg/L; LC50 Bacteria, >1000 mg/L

Persistence and Degradability:

2-Butoxyethanol: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Benzyl Alcohol is easily biodegradable by biological sewage treatment

Bioaccumulative Potential:

2-Butoxyethanol: Bioconcentration potential is low (BCF less than 100 or LOG POW less than 3).

Diethylene glycol monobutyl ether: According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

An estimated BCF of 1 was calculated for benzyl alcohol(SRC), using a log Kow of 1.1(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low.

Mobility in Soil:

2 -Butoxyethanol: Potential for mobility in soil is high (KOC between 50 and 150).

Benzyl alcohol is expected to have very high mobility in soil.

Diethylene glycol mono-n-butyl ether is expected to have very high mobility in soil(SRC).

Other Adverse Effects: None known.

13. Disposal Considerations

Waste Disposal Method

Dispose of in accordance with all applicable local, state, and federal regulations. Do not dump into sewers or allow to enter waterways.

14. Transport Information

LAND TRANSPORT (US DOT)

Not regulated by D.O.T.

DOT Proper Shipping Name Additional Transport Information

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

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exceptions.

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

15. Regulatory Information

	US EPA SARA Title III					
	Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
	 Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} 	111-76-2	No	No	Yes-Cat. N230	No
3	2. Benzenemethanol {Benzyl alcohol}	100-51-6	No	No	No	No
	 Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} 	112-34-5	No	No	Yes-Cat. N230	No
4	 Propylene glycol phenyl ether {(not 313)} 	770-35-4	No	No	No	No
	US EPA CAA, CWA, TSCA					
	Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
	 Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} 	111-76-2	HAP, ODC ()	No	Inventory	No
3	2. Benzenemethanol {Benzyl alcohol}	100-51-6	HAP, ODC ()	No	Inventory	No
-	 Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} 	112-34-5	HAP, ODC ()	No	Inventory	No
	4. Propylene glycol phenyl ether {(not 313)}	770-35-4	HAP, ODC ()	No	Inventory, 8A PAIR, 8D TERM	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.