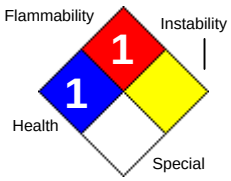
# MATERIAL SAFETY DATA SHEET
## Goof Off 2

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## 1. Product and Company Identification

**Product Code:** 2465
**Product Name:** Goof Off 2
**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.
**Synonyms**
FG641TEMP, FG642TEMP, FG644TEMP, FG659, FG641, FG642, FG644, FG659S

## 2. Hazards Identification

**GHS Precaution Phrases**
Avoid breathing mist/vapors/spray. Wash hands thoroughly after handling.

**Emergency Overview**
WARNING: Eye and Skin Irritant. Harmful if Swallowed.
**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 severe 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.

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.

## 3. Composition/Information on Ingredients

| Hazardous 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. Tall oil, potassium salt | 68647-71-2 | 3.0 -7.0 % |
| 4. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} | 112-34-5 | 1.0 -5.0 % |
| 5. 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 (93.3 C) Method Used: Setaflash Closed Cup (Rapid Setaflash)

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

**Special Fire Fighting Procedures**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear. Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. 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.

**Unusual Fire and Explosion Hazards**

Flashpoint is greater than 200 F, but not determined. Material will only burn when it has dried.

**Hazardous Combustion Products**

Carbon monoxide, carbon dioxide, oxides of carbon and other hydrocarbons.

**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**

Isolate the immediate area. Prevent unauthorized entry. 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.

## 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

| Hazardous 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. Tall oil, potassium salt | 68647-71-2 | No data. | No data. | No data. |
| 4. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} | 112-34-5 | No data. | No data. | No data. |
| 5. 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**

Safety glasses should be worn during normal handling of this material.

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

**Protective Gloves**

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

| | |
|---|---|
| **Physical States:** | [ ] Gas [ X ] Liquid [ ] Solid |
| **Melting Point:** | 28.00 F (-2.2 C) |
| **Boiling Point:** | 212.00 F (100.0 C) |
| **Autoignition Pt:** | No data. |
| **Flash Pt:** | > 200.00 F (93.3 C) Method Used: Setaflash Closed Cup (Rapid Setaflash) |
| **Explosive Limits:** | LEL: No data. UEL: No data. |
| **Specific Gravity (Water = 1):** | No data. |
| **Density:** | 8.277 LB/GL |
| **Bulk density:** | No data. |
| **Vapor Pressure (vs. Air or mm Hg):** | No data. |
| **Vapor Density (vs. Air = 1):** | < 1 |
| **Evaporation Rate (vs Butyl Acetate=1):** | > 1 |
| **Solubility in Water:** | Complete |
| **Percent Volatile:** | 87.0 % by weight. |
| **VOC / Volume:** | 4.0000 G/L |
| **Heat Value:** | No data. |
| **Particle Size:** | No data. |
| **Corrosion Rate:** | No data. |
| **pH:** | 8.3 - 9 |

**Appearance and Odor**

Slight yellow to clear.

## 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability**

None known.

**Incompatibility - Materials To Avoid**

Strong oxidizing agents, isocyanates, acetaldehyde, aluminum alkyl compounds and strong mineral acids.

**Hazardous Decomposition Or Byproducts**

Carbon monoxide, carbon dioxide

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

**Conditions To Avoid - Hazardous Reactions**

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 Mouse oral 1.2 g/kg
LD50 Rabbit oral 0.32 g/kg
LD50 Guinea pig oral 1.2 g/kg
LD50 Rabbit dermal 400 mg/kg
LD50 Rat (male) oral 560-3000 mg/kg /from table/
LD50 Mouse (male) oral 1519 mg/kg (fasting) /from table/
LC50 Rat (male) inhalation 486 ppm/4 hr /from table/
LC50 Rat (female) inhalation 450 ppm/4 hr /from table/
LC50 Mouse inhalation 700 ppm/7 hr /from table/
LD50 Rat (female) ip 550 mg/kg /from table/
LD50 Rat (female) iv 340 mg/kg /from table/
LD50 Mouse iv 1130 mg/kg /from table/
LD50 Rabbit (male) iv 280 mg/kg /from table/

Benzyl Alcohol:
LD50 Rat oral 3.1 g/kg
LD50 Mouse intravenous < 0.5 ml/kg /94% benzyl alcohol/
LC100 Rat inhalation 200-300 ppm/8 hr
LD50 Rat oral 1.23 g/kg, 3.1 g/kg, and 2.08 g/kg
LD50 Mouse oral 1.58 g/kg
LD50 Rabbit oral 1.94 g/kg
LD50 Guinea pig dermal was less than 5 ml/kg
LC50 Rat inhalation 1000 ppm/8 hr

Diethylene Glycol Monobutyl Ether:
LD50 Mouse oral 2400 mg/kg bw
LD50 Rat (male) oral 7292 mg/kg bw
LD50 Rat oral 4500 mg/kg bw
LD50 Mouse ip 850 mg/kg bw
LD50 Rat ip 500-1000 mg/kg bw
LD50 Rabbit dermal 2700 mg/kg bw
LD50 Rat oral 6600 mg/kg bw
LD50 Rabbit oral 2200 mg/kg
LD50 Rat oral 6560 mg/kg
LD50 Rat oral 5660 mg/kg
LD50 Rabbit dermal 4120 mg/kg
LD50 Guinea pig oral 2000 mg/kg

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:

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.

| Hazardous Components (Chemical Name) | CAS # | NTP | IARC | ACGIH | OSHA |
|---|---|---|---|---|---|
| 1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | 111-76-2 | Possible | 2B | A3 | No |
| 2. Benzenemethanol {Benzyl alcohol} | 100-51-6 | n.a. | n.a. | n.a. | n.a. |
| 3. Tall oil, potassium salt | 68647-71-2 | n.a. | n.a. | n.a. | n.a. |
| 4. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} | 112-34-5 | n.a. | n.a. | n.a. | n.a. |
| 5. 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)**

**DOT Proper Shipping Name** Consumer Commodity - ORMD

**LAND TRANSPORT (Canadian TDG)**

**Additional Transport Information**

The 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.

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

## 15. Regulatory Information

**Canadian Chemical Lists**

| Hazardous Components (Chemical Name) | CAS # | Canadian NPRI | Canadian IDL |
|---|---|---|---|
| 1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | 111-76-2 | Yes | Yes |
| 2. Benzenemethanol {Benzyl alcohol} | 100-51-6 | | Yes |
| 3. Tall oil, potassium salt | 68647-71-2 | | |
| 4. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} | 112-34-5 | No | Yes |
| 5. Propylene glycol phenyl ether {(not 313)} | 770-35-4 | | |

**Canadian WHMIS Classification**

No data available.

## US EPA SARA Title III

| Hazardous Components (Chemical Name) | CAS # | Sec.302 (EHS) | Sec.304 RQ | Sec.313 (TRI) | Sec.110 |
|---|---|---|---|---|---|
| 1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | 111-76-2 | No | No | Yes-Cat. N230 | |
| 2. Benzenemethanol {Benzyl alcohol} | 100-51-6 | No | No | No | No |
| 3. Tall oil, potassium salt | 68647-71-2 | No | No | No | |
| 4. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} | 112-34-5 | No | No | Yes-Cat. N230 | |
| 5. Propylene glycol phenyl ether {(not 313)} | 770-35-4 | No | No | No | |

## US EPA CAA, CWA, TSCA

| Hazardous Components (Chemical Name) | CAS # | EPA CAA | EPA CWA NPDES | EPA TSCA | CA PROP 65 |
|---|---|---|---|---|---|
| 1. Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)} | 111-76-2 | No | | Inventory, 8A PAIR, 8D | |
| 2. Benzenemethanol {Benzyl alcohol} | 100-51-6 | No | | Inventory | |
| 3. Tall oil, potassium salt | 68647-71-2 | No | | Inventory | |
| 4. Diethylene glycol monobutyl ether {2-(2-Butoxyethoxy)ethanol {(a glycol ether)} | 112-34-5 | No | | Inventory | |
| 5. Propylene glycol phenyl ether {(not 313)} | 770-35-4 | No | | Inventory, 8A PAIR, 8D TERM | |

## Canadian Regulatory Lists:

**Canadian NPRI:** Canadian National Pollutant Release Inventory

**Canadian IDL:** Canadian Ingredient Disclosure List

## SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:

**Sec.302:** EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.

**Sec.304:** EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.

**Sec.313:** EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.

**Sec.110:** EPA SARA 110 Superfund Site Priority Contaminant List

## TSCA (Toxic Substances Control Act) Lists:

**Inventory:** Chemical Listed in the TSCA Inventory.

**5A(2):** Chemical Subject to Significant New Rules (SNURS)

**6A:** Commercial Chemical Control Rules

**8A:** Toxic Substances Subject To Information Rules on Production

**8A CAIR:** Comprehensive Assessment Information Rules - (CAIR)

**8A PAIR:** Preliminary Assessment Information Rules - (PAIR)

**8C:** Records of Allegations of Significant Adverse Reactions

**8D:** Health and Safety Data Reporting Rules

**8D TERM:** Health and Safety Data Reporting Rule Terminations

**12(b):** Notice of Export

## Other Important Lists:

**CWA NPDES:** EPA Clean Water Act NPDES Permit Chemical

**CAA HAP:** EPA Clean Air Act Hazardous Air Pollutant

**CAA ODC:** EPA Clean Air Act Ozone Depleting Chemical (1=CFC, 2=HCFC)

**CA PROP 65:** California Proposition 65

## International Regulatory Lists:

## 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

**Regulatory Information**

This product has been classified according to the hazard criteria of the Controlled Products Regulations.

Concentrations reported in section 2 are weight/weight.

Ingredients disclosed in section 2 are on Canadian DSL.

2-Butoxyethanol:
WHMIS Classification:
B3 - Flammable and combustible material - Combustible liquid
D1A - Poisonous and infectious material - immediate and serious effects - Very toxic
D2B - Poisonous and infectious material - Other effects - Toxic
WHMIS Health Effects Criteria Met by this Chemical:
D1A - Acute lethality - very toxic - immediate
D2B - Eye irritation - toxic - other
D2B - Skin irritation - toxic - other

Benzenemethanol (Benzyl Alcohol):
WHMIS Classification:
B3 - Flammable and combustible material - Combustible liquid
D2B - Poisonous and infectious material - Other effects - Toxic
WHMIS Health Effects Criteria Met by this Chemical:
D2B - Eye irritation - toxic - other

Diethylene Glycol Monobutyl Ether:
WHMIS Classification:
B3 - Flammable and combustible material - Combustible liquid
D2B - Poisonous and infectious material - Other effects - Toxic
WHMIS Health Effects Criteria Met by this Chemical:
D2B - Eye irritation - toxic - other

Propylene Glycol Phenyl Ether:
WHMIS Classification:
D2B - Poisonous and infectious material - Other effects - Toxic
WHMIS Health Effects Criteria Met by this Chemical:
D2B - Eye irritation - toxic - other

## 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.