1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Goof Off Aerosol Glass Cleaner
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
Information: W.M. Barr Customer Service
Contact: (800)451-8346
(800)398-3892
Intended Use: Glass Cleaner

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

Gas Under Pressure, Liquefied gas
Serious Eye Damage/Eye Irritation, Category 2A
Germ Cell Mutagenicity, Category 1B
Simple Asphyxiant

GHS Signal Word: Danger
GHS Hazard Phrases:
H280: Containers gas under pressure; may explode if heated.
H319: Causes serious eye irritation.
H340: May cause genetic defects.
GHS Precaution Phrases:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.
GHS Response Phrases:
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313: IF exposed or concerned: Get medical attention/advice.
P337+313: If eye irritation persists, get medical advice/attention.
GHS Storage and Disposal Phrases:
P405: Store locked up.
P410+403: Protect from sunlight and store in well-ventilated place.
P501: Dispose of contents/container according to local, state and federal regulations.
This material is classified as hazardous under OSHA regulations.

This product has not been tested as a whole to determine health effects. The health effects listed below are associated with the individual ingredients listed in Section 3.

**EYES:** May cause severe eye irritation. may cause moderate corneal injury. Effects may include discomfort or pain, and redness. Effects may be slow to heal. Vapor may cause eye irritation experienced as mild discomfort and redness.

**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, etc.). Prolonged skin contact to animals which are less sensitive to hemolysis, as are humans, did not result in the absorption of harmful amounts.

**INHALATION:** Excessive exposure may cause irritation to upper respiratory tract (nose and throat). In humans, symptoms may include: headache. 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 hown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

**INGESTION:** Moderate toxicity 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. 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 hown to be significantly less sensitive to hemolysis than those of rodents and rabbits. Massive ingestion of ethylene glycol monobutyl ether may produce metabolic acidosis and subsequent secondary effects such as hemolysis, central nervous system and kidney effects.

**CHRONIC OVEREXPOSURE EFFECTS:**

2-Butoxyethanol:
- In animals, effects have been reported on 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. In long term animal studies, small but statistically significant increases in tumors were observed in mice but not rats. The effects are not believed to be relevant to humans.
- In long-term animal studies with ethylene glycol butyl ether, small but statistically significant increases in tumors were observed in mice but not rats. The effects are not believed to be relevant to humans. If the material is handled in accordance with proper industrial handling procedures, exposures should not pose a carcinogenic risk to man.
- In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Has been toxic to the fetus in lab animals at doses toxic to the mother.

**TARGET ORGANS:** kidney, liver, eye, respiratory tract
Goof Off Aerosol Glass Cleaner

SAFETY DATA SHEET

03/27/2015

Supersedes Revision: 03/27/2015

PRIMARY ROUTES OF ENTRY: skin, inhalation, ingestion

Medical Conditions Generally None known.
Aggravated By Exposure:

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>Concentration</th>
<th>RTECS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}</td>
<td>&lt;10.0 %</td>
<td>KJ8575000</td>
</tr>
<tr>
<td>68476-86-8</td>
<td>Liquified petroleum gas, sweetened {propane, isobutane, n-butane}</td>
<td>&lt; 5.0 %</td>
<td>NA</td>
</tr>
</tbody>
</table>

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

4. FIRST AID MEASURES

Skin: Immediately begin washing the skin thoroughly with large amounts of water and mild soap, if available, while removing contaminated clothing. Seek medical attention if irritation persists.

Eyes: Immediately begin to flush eyes with water, remove any contact lens. Continue to flush the eyes for at least 15 minutes, then seek immediate 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, hospital emergency room, or poison control center immediately. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down.

5. FIRE FIGHTING MEASURES

Flash Pt: No data.
Explosive Limits: LEL: No data. UEL: No data.
Autoignition Pt: No data.

Suitable Extinguishing Media: Non-combustible liquid - use extinguishing media for underlying cause of fire.
Unsuitable Extinguishing Media: None known.

Fire Fighting Instructions: 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.

Flammable Properties and Hazards: FLASHPOINT of Liquid Concentrate: No flash to boiling. The liquid concentrate does not exhibit a flashpoint per the Setaflash Closed Cup test method.

The heat of combustion of the aerosol product is less than 4 kJ/g.

Aerosol flame extension testing does not project flame or exhibit flash back.
6. ACCIDENTAL RELEASE MEASURES

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

For small spills: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

For large spills: Wear appropriate PPE and keep all unnecessary personnel out of the area. Stop spill at the source, dike ahead of the spill if possible, and contain the spill. Recover as much as possible and use absorbent material to collect the remaining liquid. Prevent runoff from entering drains, sewers, or bodies of water.

Dispose of according to all applicable local, state, and federal regulations.

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 of vapors or mist. Avoid contact with eyes and skin.

A source of clean water should be available in or near the work area for flushing of the eyes and skin if contact occurs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Partial Chemical Name</th>
<th>OSHA TWA</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethanol, 2-Butoxy- (Ethylene glycol n-butyl ether, (a glycol ether))</td>
<td>PEL: 50 ppm TLV: 20 ppm</td>
<td>No data.</td>
<td></td>
</tr>
<tr>
<td>68476-86-8</td>
<td>Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Respiratory Equipment (Specify Type): When used by the consumer following directions for use and with adequate ventilation, respiratory protection should not be needed.

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

Where contact with the eyes or face is likely, a faceshield or chemical splash 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 nitrile rubber may provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.

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

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Work/Hygienic/Maintenance Practices:

Wash hands thoroughly after use and before eating, drinking, smoking, or using the restroom.

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

Discard any clothing or other protective equipment that cannot be decontaminated.

Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance and Odor: No data available.

Melting Point: No data.

Boiling Point: No data.

Autoignition Pt: No data.

Flash Pt: No data.

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

Specific Gravity (Water = 1): 0.9937

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Evaporation Rate: No data.

Solubility in Water: No data.

pH: 9.85 - 10.85

Percent Volatile: No data.

10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability: No data available.

Incompatibility - Materials To Avoid: Strong acids and oxidizers.

Hazardous Decomposition Or Byproducts: Aldehydes, ketones, organic acids

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

Conditions To Avoid - Hazardous Reactions: No data available.
11. TOXICOLOGICAL INFORMATION

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

Carcinogenicity/Other Information: 

CAS# 111-76-2: 
Acute toxicity, LC50, Inhalation, Rat, 450.0 PPM, 4 H. 
Result: 
Behavioral: Ataxia. 
Nutritional and Gross Metabolic: Weight loss or decreased weight gain. 

Acute toxicity, LD50, Skin, Species: Rabbit, 220.0 MG/KG. 
Result: 
Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord). 
Effects on Embryo or Fetus: Other effects to embryo. 
Specific Developmental Abnormalities: Musculoskeletal system. 
- Dow Chemical Company Reports., Dow Chemical USA, Health and Environment Research, Toxicology Research Lab, Midland, MI 48640, Vol/p/yr: MSD-46, 

Acute toxicity, LD50, Oral, Rat, 250.0 mg/kg. 
Result: 
Lungs, Thorax, or Respiration: Changes in pulmonary vascular resistance. 

Standard Draize Test, Eyes, Species: Rabbit, 100.0 MG, Severe. 
Result: 
Effects on Newborn: Apgar score (human only). 
Effects on Newborn: Other neonatal measures or effects. 
Effects on Newborn: Drug dependency. 

IARC 3: Not Classifiable as to Carcinogenicity in Humans. 
ACGIH A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethanol, 2-Butoxy- (Ethylene glycol n-butyl ether, (a glycol ether))</td>
<td>n.a.</td>
<td>3</td>
<td>A3</td>
<td>n.a.</td>
</tr>
<tr>
<td>68476-86-8</td>
<td>Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

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

Waste Disposal Method: Dispose of in accordance with local, state, and federal laws.

Do not place material in general trash.

Do not allow material to enter bodies of water or sewers.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Aerosols, non-flammable, Ltd. Qty.
DOT Hazard Class: 2.2 NONFLAMMABLE GAS
UN/NA Number: UN1950

15. REGULATORY INFORMATION

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

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Hazardous Components (Chemical Name)</th>
<th>S. 302 (EHS)</th>
<th>S. 304 RQ</th>
<th>S. 313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethanol, 2-Butoxy- (Ethylene glycol n-butyl ether, (a glycol ether))</td>
<td>No</td>
<td>No</td>
<td>Yes-Cat. N230</td>
</tr>
<tr>
<td>68476-86-8</td>
<td>Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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
[ X] Yes [ ] No Fire Hazard
[ X] Yes [X] No Sudden Release of Pressure Hazard
[ ] Yes [X] No Reactive Hazard

Other US EPA or State Lists:

<table>
<thead>
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<th>Hazardous Components (Chemical Name)</th>
<th>Other US EPA or State Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>111-76-2</td>
<td>Ethanol, 2-Butoxy- (Ethylene glycol n-butyl ether, (a glycol ether))</td>
<td>CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
<tr>
<td>68476-86-8</td>
<td>Liquified petroleum gas, sweetened (propane, isobutane, n-butane)</td>
<td>CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No</td>
</tr>
</tbody>
</table>

Regulatory Information Statement:
All components of this material are listed on the TSCA Inventory or are exempt.

16. OTHER INFORMATION

Revision Date: 04/15/2015
Preparer Name: W.M. Barr EHS Dept (901)775-0100
Additional Information About This Product: No data available.

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...
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