# SAFETY DATA SHEET

## 1. Identification

**Product number** USN: 2476961 Appeal P/N: APP12730

**Product identifier** **Appeal Glass Cleaner**

**Revision date** 06-06-2014

**Company information** Interline Brands
701 San Marco Blvd.
Jacksonville, FL 32207 United States

**Company phone** 904-421-1400

**Emergency telephone US** 1-866-836-8855

**Emergency telephone outside US** 1-952-852-4646

**Version #** 14

**Supersedes date** 05-19-2014

**Recommended use** Glass Cleaner

**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Gases under pressure Liquefied gas

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Signal word** Warning

**Hazard statement** Contains gas under pressure; may explode if heated.

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Protect from sunlight. Store in a well-ventilated place.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** Not classified.

**Supplemental information**

Not applicable.

## 3. Composition/information on ingredients

**Mixtures**

**Hazardous components**

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| 2-Butoxyethanol | | 111-76-2 | 2.5 - 10 |
| Ethyl Alcohol | | 64-17-5 | 2.5 - 10 |
| Butane | | 106-97-8 | 1 - 2.5 |
| Propane | | 74-98-6 | 1 - 2.5 |
| Other components below reportable levels | | | 90 - 100 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

| | |
|---|---|
| **Ingestion** | In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth. |
| **Most important symptoms/effects, acute and delayed** | Direct contact with eyes may cause temporary irritation. |
| **Indication of immediate medical attention and special treatment needed** | Provide general supportive measures and treat symptomatically. |
| **General information** | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

## 5. Fire-fighting measures

| | |
|---|---|
| **Suitable extinguishing media** | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |
| **Unsuitable extinguishing media** | Do not use water jet as an extinguisher, as this will spread the fire. |
| **Specific hazards arising from the chemical** | Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed. |
| **Special protective equipment and precautions for firefighters** | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. |
| **Fire-fighting equipment/instructions** | In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. |
| **Specific methods** | Move container from fire area if it can be done without risk. |

## 6. Accidental release measures

| | |
|---|---|
| **Personal precautions, protective equipment and emergency procedures** | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. See Section 8 of the MSDS for Personal Protective Equipment. For personal protection, see section 8 of the MSDS. |
| **Methods and materials for containment and cleaning up** | Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the MSDS. |
| **Environmental precautions** | Avoid discharge into drains, water courses or onto the ground. |

## 7. Handling and storage

| | |
|---|---|
| **Precautions for safe handling** | Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not re-use empty containers. Do not get this material in contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Observe good industrial hygiene practices. |
| **Conditions for safe storage, including any incompatibilities** | Level 1 Aerosol.<br><br>Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the MSDS). Level 1 Aerosol (NFPA 30B) |

## 8. Exposure controls/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| 2-Butoxyethanol (CAS 111-76-2) | PEL | 240 mg/m3<br>50 ppm |
| Ethyl Alcohol (CAS 64-17-5) | PEL | 1900 mg/m3<br>1000 ppm |
| Propane (CAS 74-98-6) | PEL | 1800 mg/m3<br>1000 ppm |

**US. ACGIH Threshold Limit Values**

| Components | Type | Value |
|---|---|---|
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 20 ppm |
| Ethyl Alcohol (CAS 64-17-5) | STEL | 1000 ppm |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components | Type | Value |
|---|---|---|
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 24 mg/m3 |
| | | 5 ppm |
| Butane (CAS 106-97-8) | TWA | 1900 mg/m3 |
| | | 800 ppm |
| Ethyl Alcohol (CAS 64-17-5) | TWA | 1900 mg/m3 |
| | | 1000 ppm |
| Propane (CAS 74-98-6) | TWA | 1800 mg/m3 |
| | | 1000 ppm |

**Biological limit values**

**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|---|---|---|---|---|
| 2-Butoxyethanol (CAS 111-76-2) | 200 mg/g | Butoxyacetic acid (BAA), with hydrolysis | Creatinine in urine | * |

* - For sampling details, please see the source document.

**Exposure guidelines**

**US - California OELs: Skin designation**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

2-Butoxyethanol (CAS 111-76-2) Skin designation applies.

**US - Tennesse OELs: Skin designation**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear protective gloves.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** Clear.

**Color** Colorless. Pale yellow

**Form** Aerosol. Liquefied gas.

**Physical state** Gas.

**Flash point** -156.00 °F (-104.44 °C) Propellant estimated

**Melting point/freezing point** Not available.

**Odor** Butyl

**pH** 9.5 - 10.5 estimated

| | |
|---|---|
| **Solubility(ies)** | Not available. |
| **Vapor density** | Not available. |
| **Vapor pressure** | 80 - 100 psig @70F estimated |
| **Viscosity** | Not available. |

**Other information**

| | |
|---|---|
| **Aerosol spray enclosed space** | |
| **Deflagration density** | > 2.52 g/cm3 Tested |
| **Aerosol spray ignition distance** | < 15 cm Tested estimated |
| **Specific gravity** | 0.97 estimated |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| **Chemical stability** | Material is stable under normal conditions. |
| **Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur. |
| **Conditions to avoid** | Avoid temperatures exceeding the flash point. Contact with incompatible materials. Fire or intense heat may cause violent rupture of packages. |
| **Hazardous decomposition products** | No hazardous decomposition products are known. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Ingestion** | Expected to be a low ingestion hazard. |
| **Inhalation** | Prolonged inhalation may be harmful. |
| **Skin contact** | 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.<br><br>No adverse effects due to skin contact are expected. |
| **Eye contact** | Direct contact with eyes may cause temporary irritation. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Direct contact with eyes may cause temporary irritation. |

**Information on toxicological effects**

**Acute toxicity** Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

| Product | Species | Test Results |
|---|---|---|
| Glass Cleaner (CAS Mixture) | | |
| **Acute** | | |
| *Dermal* | | |
| LD50 | Rabbit | 7674.2803 mg/kg, estimated |
| *Inhalation* | | |
| LC50 | Mouse | 41337.3867 mg/l, 2 Hours, estimated |
| | | 24423.8574 mg/l, 7 Hours, estimated |
| | | 1157.1971 mg/l, 4 Hours, estimated |
| | Rat | 77781.5078 mg/l, 15 Minutes, estimated |
| | | 15701.0518 mg/l, 4 Hours, estimated |
| | | 75.2338 mg/l/4h, estimated |
| *Oral* | | |
| LD50 | Dog | 163.1945 g/kg, estimated |
| | Guinea pig | 33.4032 g/kg, estimated |
| | Mouse | 41.8347 g/kg, estimated |
| | Rabbit | 11.1629 g/kg, estimated |
| | Rat | 16398.877 mg/kg, estimated |
| *Other* | | |
| LD50 | Mouse | 16186.6035 mg/kg, estimated |

| Product | Species | Test Results |
|---|---|---|
| | Rabbit | 9769.543 mg/kg, estimated |
| | Rat | 9276.1592 mg/kg, estimated |
| **Components** | **Species** | **Test Results** |
| 2-Butoxyethanol (CAS 111-76-2) | | |
| **Acute** | | |
| *Dermal* | | |
| LD50 | Rabbit | 220 mg/kg |
| *Inhalation* | | |
| LC50 | Mouse | 700 mg/l, 7 Hours |
| | Rat | 450 mg/l, 4 Hours |
| | | 2.21 mg/l/4h |
| *Oral* | | |
| LD50 | Guinea pig | 1.2 g/kg |
| | Mouse | 1.2 g/kg |
| | Rabbit | 0.32 g/kg |
| | Rat | 470 mg/kg |
| *Other* | | |
| LD50 | Mouse | 1130 mg/kg |
| | Rabbit | 280 mg/kg |
| | Rat | 340 mg/kg |
| Butane (CAS 106-97-8) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Mouse | 680 mg/l, 2 Hours |
| | Rat | 658 mg/l, 4 Hours |
| Ethyl Alcohol (CAS 64-17-5) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Mouse | 39 mg/l, 4 Hours |
| | Rat | 20000 mg/l, 10 Hours |
| *Oral* | | |
| LD50 | Dog | 5.5 g/kg |
| | Guinea pig | 5.6 g/kg |
| | Mouse | 3450 mg/kg |
| | Rat | 6.2 g/kg |
| *Other* | | |
| LD50 | Mouse | 933 mg/kg |
| | Rat | 1440 mg/kg |
| Propane (CAS 74-98-6) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Rat | > 1442.847 mg/l, 15 Minutes |
| | | 658 mg/l/4h |

* Estimates for product may be based on additional component data not shown.

| | |
|---|---|
| **Skin corrosion/irritation** | Prolonged skin contact may cause temporary irritation. |
| **Serious eye damage/eye irritation** | Direct contact with eyes may cause temporary irritation. |
| **Respiratory sensitization** | Not a respiratory sensitizer. |
| **Skin sensitization** | This product is not expected to cause skin sensitization. |
| **Germ cell mutagenicity** | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| **Carcinogenicity** | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |

**IARC Monographs. Overall Evaluation of Carcinogenicity**

2-Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

**Reproductive toxicity** Possible reproductive hazard. This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard. Not likely, due to the form of the product.

**Chronic effects** Prolonged inhalation may be harmful. May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

| Product | | Species | Test Results |
|---|---|---|---|
| Glass Cleaner (CAS Mixture) | | | |
| Crustacea | EC50 | Daphnia | 53463.5547 mg/L, 48 Hours, estimated |
| Fish | LC50 | Fish | 42460.2109 mg/L, 96 Hours, estimated |
| **Components** | | **Species** | **Test Results** |
| 2-Butoxyethanol (CAS 111-76-2) | | | |
| Crustacea | EC50 | Daphnia | 1819 mg/L, 48 Hours |
| **Aquatic** | | | |
| Fish | LC50 | Inland silverside (Menidia beryllina) | 1250 mg/l, 96 hours |
| Ethyl Alcohol (CAS 64-17-5) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 7700 - 11200 mg/l, 48 hours |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | > 100.1 mg/l, 96 hours |

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| Ethyl Alcohol | -0.31 |
| 2-Butoxyethanol | 0.83 |
| Propane | 2.36 |
| Butane | 2.89 |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

**DOT**

**UN number** UN1950

| | |
|---|---|
| **UN proper shipping name** | Aerosols |
| **Transport hazard class(es)** | 2.2 |
| **Subsidiary class(es)** | Not available. |
| **Packing group** | Not available. |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |
| **Labels required** | None |
| **Packaging exceptions** | 306 |
| **Packaging non bulk** | None |
| **Packaging bulk** | None |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

**IATA**

| | |
|---|---|
| **UN number** | UN1950 |
| **UN proper shipping name** | Aerosols, non-flammable |
| **Transport hazard class(es)** | 2.2 |
| **Subsidiary class(es)** | - |
| **Packaging group** | Not available. |
| **Environmental hazards** | No |
| **Labels required** | 2.2 |
| **ERG Code** | 2L |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |
| **Packaging Exceptions** | LTD QTY |

**IMDG**

| | |
|---|---|
| **UN number** | UN1950 |
| **UN proper shipping name** | AEROSOLS |
| **Transport hazard class(es)** | 2.2 |
| **Subsidiary class(es)** | - |
| **Packaging group** | Not available. |
| **Environmental hazards** | |
| **Marine pollutant** | No |
| **Labels required** | None |
| **EmS** | Not available. |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |
| **Packaging Exceptions** | LTD QTY |

| | |
|---|---|
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not applicable. |

**DOT**

**IATA; IMDG**

## 15. Regulatory information

| | |
|---|---|
| **US federal regulations** | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. |

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

| | |
|---|---|
| **Hazard categories** | Immediate Hazard - Yes<br>Delayed Hazard - No<br>Fire Hazard - No<br>Pressure Hazard - Yes<br>Reactivity Hazard - No |
| **SARA 302 Extremely hazardous substance** | No |
| **SARA 311/312 Hazardous chemical** | No |

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Not listed.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations**

**US. New Jersey Worker and Community Right-to-Know Act**

| | |
|---|---|
| Butane (CAS 106-97-8) | 500 lbs |
| Propane (CAS 74-98-6) | 500 lbs |

**US. Pennsylvania RTK - Hazardous Substances**

2-Butoxyethanol (CAS 111-76-2)
Butane (CAS 106-97-8)
Ethyl Alcohol (CAS 64-17-5)
Propane (CAS 74-98-6)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

| | |
|---|---|
| **Issue date** | 07-12-2013 |
| **Revision date** | 06-06-2014 |
| **Version #** | 14 |
| **Further information** | Not available. |
| **References** | EPA: AQUIRE database<br>NLM: Hazardous Substances Data Base<br>US. IARC Monographs on Occupational Exposures to Chemical Agents |
| **Disclaimer** | The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. |