1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity: Office Plus, Aerosol Desk and Office Cleaner
Alternate Names: LHB Part Number: 0184---000
National Stock Number: 7930-01-512-8969
CAGE Code: 0FTT5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: See product label.
Application Method: See product label.

1.3. Details of the supplier of the safety data sheet

Company Name: LHB Industries
8833 Fleischer Place
Berkeley, MO 63134

Emergency
24 hour Emergency Telephone No.: (800) 633-8253 (PERS)
Customer Service: LHB Industries (314) 423-4333

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Flam. Gas 1;H220: Extremely flammable gas.
Press. Gas;H280: Contains gas under pressure; may explode if heated.
Skin Irrit. 3;H316: Causes mild skin irritation. (Not adopted by US OSHA)

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger

H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H316 Causes mild skin irritation.
[Prevention]:
P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

[Response]:
P332+313 If skin irritation occurs: Get medical advice / attention.
P377 Leaking gas fire - do not extinguish unless leak can be stopped safely.
P381 Eliminate all ignition sources if safe to do so.

[Storage]:
P410+403 Protect from sunlight. Store in a well ventilated place.

[Disposal]:
No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol monobutyl ether</td>
<td>1.0 - 10</td>
<td>Acute Tox. 4;H332</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000111-76-2</td>
<td></td>
<td>Acute Tox. 4;H312</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute Tox. 4;H302</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Irrit. 2;H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Irrit. 2;H315</td>
<td></td>
</tr>
<tr>
<td>Propane, 2-methyl-</td>
<td>1.0 - 10</td>
<td>Flam. Gas 1;H220</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000075-28-5</td>
<td></td>
<td>Press. Gas;H280</td>
<td></td>
</tr>
<tr>
<td>Butane</td>
<td>1.0 - 10</td>
<td>Flam. Gas 1;H220</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000106-97-8</td>
<td></td>
<td>Press. Gas;H280</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>1.0 - 10</td>
<td>Flam. Gas 1;H220</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000074-98-6</td>
<td></td>
<td>Press. Gas;H280</td>
<td></td>
</tr>
</tbody>
</table>

[1] Substance classified with a health or environmental hazard.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General
Move victim to fresh air.
Call 911 or emergency medical service if deemed necessary.
Give artificial respiration if victim is not breathing.
Administer oxygen if breathing is difficult.
Remove and isolate contaminated clothing and shoes. 
In case of contact with liquefied gas, thaw frosted parts with lukewarm water. 
Keep victim warm and quiet. 
Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### Inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

### Eyes
Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

### Skin
Remove and isolate contaminated clothing and shoes. Clothing frozen to the skin should be thawed before being removed. In case of contact with liquefied gas, thaw frosted parts with lukewarm water.

### Ingestion
If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

## 4.2. Most important symptoms and effects, both acute and delayed

### Overview
No specific symptom data available. 
See section 2 for further details.

### Skin
Causes mild skin irritation. (Not adopted by US OSHA)

## 5. Fire-fighting measures

### 5.1. Extinguishing media

**Fire involving Tanks:** Some of these materials, if spilled, may evaporate leaving a flammable residue. Some of these materials, if spilled, may evaporate leaving a flammable residue.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of Carbon
Keep away from heat / sparks / open flames / hot surfaces - No smoking.

### 5.3. Advice for fire-fighters

Wear positive pressure self-contained breathing apparatus (SCBA). 
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. 
Structural firefighters’ protective clothing will only provide limited protection. 
Some may burn but none ignite readily. 
Containers may explode when heated. 
Ruptured cylinders may rocket. 
Vapors may cause dizziness or asphyxiation without warning. 
Vapors from liquefied gas are initially heavier than air and spread along ground. 
Contact with gas or liquefied gas may cause burns, severe injury and/or frostbite. 
Fire may produce irritating, corrosive and/or toxic gases.
6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Do not touch or walk through spilled material.
Stop leak if you can do it without risk.
Do not direct water at spill or source of leak.
Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.
If possible, turn leaking containers so that gas escapes rather than liquid.
Prevent entry into waterways, sewers, basements or confined areas.
Allow substance to evaporate.
Ventilate the area.

6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Stay upwind.
Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).
Keep out of low areas.
Ventilate closed spaces before entering.

7. Handling and storage

7.1. Precautions for safe handling
See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities
Handle containers carefully to prevent damage and spillage.
Store this product below 120°F, in a cool, dry, well ventilated area away from heat, sparks, flame, oxidizers and out of direct sunlight.
See section 2 for further details. - [Storage]:

7.3. Specific end use(s)
No data available.
# 8. Exposure controls and personal protection

## 8.1. Control parameters

### Exposure

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000074-98-6</td>
<td>Propane</td>
<td>OSHA</td>
<td>TWA 1000 ppm (1800 mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>Ensure Minimal Oxygen Content (ACGIH appendix F)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 1000 ppm (1800 mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0000075-28-5</td>
<td>Propane, 2-methyl-</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>STEL: 1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 800 ppm (1900 mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0000106-97-8</td>
<td>Butane</td>
<td>OSHA</td>
<td>No Established Limit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 600 ppm STEL: 750 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 800 ppm (1900 mg/m³)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0000111-76-2</td>
<td>Ethylene glycol monobutyl ether</td>
<td>OSHA</td>
<td>TWA 50 ppm (240 mg/m³) [skin]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 20 ppm Revised 2003,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 5 ppm (24 mg/m³) [skin]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
</tbody>
</table>

### Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000074-98-6</td>
<td>Propane</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0000075-28-5</td>
<td>Propane, 2-methyl-</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0000106-97-8</td>
<td>Butane</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0000111-76-2</td>
<td>Ethylene glycol monobutyl ether</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

**Respiratory**
If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

**Eyes**
Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids.

**Skin**
Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact.

**Engineering Controls**
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices**
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

---

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Pleasant</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Measured</td>
</tr>
<tr>
<td>pH</td>
<td>10.0</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Nonflammable (CSMA)</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>slower than ether</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Flam. Gas 1;H220 Extremely flammable gas.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td><strong>Lower Explosive Limit:</strong> N/A</td>
</tr>
<tr>
<td></td>
<td><strong>Upper Explosive Limit:</strong> N/A</td>
</tr>
<tr>
<td>Vapor pressure (Pa)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.961 ( 8.01 lb/gal )</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Kow)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>Not Measured</td>
</tr>
</tbody>
</table>
VOC % 8.8% by wt.
Maximum Incremental Reactivity Not Measured
% Volatile (by volume) Not Measured

9.2. Other information
No other relevant information.

10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Do not mix with alkalis.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Oxides of Carbon

11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LD50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LD50, mg/L/4hr</th>
<th>Inhalation Gas LD50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol monobutyl ether - (111-76-2)</td>
<td>1,414.00, Guinea Pig - Category: 4</td>
<td>1,200.00, Guinea Pig - Category: 4</td>
<td>173.00, Guinea Pig - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Propane, 2-methyl- - (75-28-5)</td>
<td>No data available</td>
<td>No data available</td>
<td>658.00, Rat - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Butane - (106-97-8)</td>
<td>No data available</td>
<td>No data available</td>
<td>658.00, Rat - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Propane - (74-98-6)</td>
<td>No data available</td>
<td>No data available</td>
<td>658.00, Rat - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).
12. Ecological information

12.1. Toxicity
No additional information provided for this product. See Section 3 for chemical specific data.

**Aquatic Ecotoxicity**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol monobutyl ether - (111-76-2)</td>
<td>220.00, Fish (Piscis)</td>
<td>1,000.00, Daphnia magna</td>
<td>Not Available</td>
</tr>
<tr>
<td>Propane, 2-methyl- - (75-28-5)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Butane - (106-97-8)</td>
<td>6.00, Fish (Piscis)</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Propane - (74-98-6)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured
12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.

### 13. Disposal considerations

13.1. Waste treatment methods
Do not allow into drains or water courses. Wastes and emptied containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using information provided in this data sheet advice should be obtained from the Waste Regulation Authority, whether the special waste regulations apply.

### 14. Transport information

<table>
<thead>
<tr>
<th>DOT (Domestic Surface Transportation)</th>
<th>IMO / IMDG (Ocean Transportation)</th>
<th>ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN number</td>
<td>UN number</td>
</tr>
<tr>
<td>UN1950</td>
<td>UN1950, Aerosols, non-flammable, (each not exceeding 1 L capacity), 2.2,</td>
<td>UN1950, Aerosols, non-flammable, (each not exceeding 1 L capacity)</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>TIMDG: 2.1</td>
<td>TIMDG: 2.1</td>
</tr>
<tr>
<td>UN1950, Aerosols, non-flammable, (each not exceeding 1 L capacity), 2.2,</td>
<td>IMDG: 2.1</td>
<td>Air Class: 2.1</td>
</tr>
<tr>
<td>DOT Hazard Class: 2.2</td>
<td>IMDG: 2.1</td>
<td>Air Class: 2.1</td>
</tr>
<tr>
<td>DOT Label: 2.2</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>IMDG</td>
<td>IMDG: 2.1</td>
</tr>
<tr>
<td>IMDG</td>
<td>Marine Pollutant: No</td>
<td>Marine Pollutant: No</td>
</tr>
<tr>
<td>14.6. Special precautions for user</td>
<td>No further information</td>
<td>No further information</td>
</tr>
</tbody>
</table>

### 15. Regulatory information

Regulatory Overview  The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act (TSCA) 

All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification

A

US EPA Tier II Hazards

Fire: Yes
Sudden Release of Pressure: Yes
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
(No Product Ingredients Listed)

EPCRA 302 Extremely Hazardous:
(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:

Ethylene glycol monobutyl ether

Proposition 65 - Carcinogens (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):
(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):
(No Product Ingredients Listed)

N.J. RTK Substances (>1%):

Butane
Ethylene glycol monobutyl ether
Propane
Propane, 2-methyl-

Penn RTK Substances (>1%):

Butane
Ethylene glycol monobutyl ether
Propane
Propane, 2-methyl-
16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

- H220 Extremely flammable gas.
- H280 Contains gas under pressure; may explode if heated.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

IMPORTANT NOTE: This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Document