SAFETY DATA SHEET

1. Identification

Product identifier: LPS® NoFlash

Other means of identification

Part Number: 04016

Recommended use: An aggressive non-flammable solvent blend for the removal of dirt, moisture, dust, flux and oxides from the internal components of electronic or precision equipment such as circuit boards, and the internal components of electronic devices used in factories and other industrial settings.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer: ITW Pro Brands

Company name: 4647 Hugh Howell Rd.
Address: Tucker, GA 30084 (U.S.A.)
Country: Tel: +1 770-243-8800
In Case of Emergency: 1-800-424-9300 (inside U.S.)
+001 703-527-3887 (outside U.S.)
Website: www.lpslabs.com
E-mail: lpssds@itwprobrands.com

2. Hazard(s) identification

Physical hazards: Gases under pressure
Health hazards: Liquefied gas

Skin corrosion/irritation: Category 2
Serious eye damage/eye irritation: Category 2A
Carcinogenicity: Category 2
Reproductive toxicity: Category 1B
Specific target organ toxicity, single exposure: Category 3 respiratory tract irritation
Specific target organ toxicity, single exposure: Category 3 narcotic effects
Specific target organ toxicity, repeated exposure: Category 2 (Liver, Central Nervous System)

Environmental hazards: Not classified.
OSHA defined hazards: Not classified.

Label elements

Signal word: Danger

Hazard statement: Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May damage fertility or the unborn child. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs (Liver, Central Nervous System) through prolonged or repeated exposure.

Precautionary statement

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response
If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see this label). Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention.

Storage
Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)
None known.

Supplemental information
None.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n-Propyl Bromide</td>
<td></td>
<td>106-94-5</td>
<td>60 - 70</td>
</tr>
<tr>
<td></td>
<td>Ethane, 1,1,1,2-tetrafluoro-(hfc-134a)</td>
<td></td>
<td>811-97-2</td>
<td>30 - 40</td>
</tr>
<tr>
<td></td>
<td>1-Propanol</td>
<td></td>
<td>71-23-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td></td>
<td>1,2 Butylene Oxide</td>
<td></td>
<td>106-88-7</td>
<td>&lt; 1</td>
</tr>
<tr>
<td></td>
<td>t-Butanol</td>
<td></td>
<td>75-65-0</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. 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
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed
Skin irritation. Defatting of the skin. May cause redness and pain. Exposed individuals may experience eye tearing, redness, and discomfort. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

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. Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Suitable extinguishing media

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.

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. Move containers from fire area if you can do so without risk. 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
Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.

General fire hazards
Pressurized container may explode when exposed to heat or flame.

Material name: LPS® NoFlash
04016    Version #: 02    Revision date: 02-13-2018    Issue date: 05-26-2016
SDS US
2 / 10
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 protective equipment and clothing during clean-up. Avoid breathing gas. 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.

**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. Use water spray to reduce vapors or divert vapor cloud drift. Scoop up used absorbent into drums or other appropriate container. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

**Environmental precautions**
Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

**Precautions for safe handling**
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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 breathe gas. Avoid contact with eyes, skin, and clothing. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only in well-ventilated areas. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Store locked up. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in original tightly closed container. Store in a well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Propanol (CAS 71-23-8)</td>
<td>PEL</td>
<td>500 mg/m3</td>
<td></td>
</tr>
<tr>
<td>1-Propanol (CAS 71-23-8)</td>
<td>PEL</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>t-Butanol (CAS 75-65-0)</td>
<td>PEL</td>
<td>300 mg/m3</td>
<td></td>
</tr>
<tr>
<td>t-Butanol (CAS 75-65-0)</td>
<td>PEL</td>
<td>100 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Propanol (CAS 71-23-8)</td>
<td>TWA</td>
<td>100 ppm</td>
</tr>
<tr>
<td>n-Propyl Bromide (CAS 106-94-5)</td>
<td>TWA</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>t-Butanol (CAS 75-65-0)</td>
<td>TWA</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Propanol (CAS 71-23-8)</td>
<td>STEL</td>
<td>625 mg/m3</td>
</tr>
<tr>
<td>1-Propanol (CAS 71-23-8)</td>
<td>TWA</td>
<td>500 mg/m3</td>
</tr>
<tr>
<td>1-Propanol (CAS 71-23-8)</td>
<td>TWA</td>
<td>250 ppm</td>
</tr>
<tr>
<td>t-Butanol (CAS 75-65-0)</td>
<td>STEL</td>
<td>450 mg/m3</td>
</tr>
<tr>
<td>t-Butanol (CAS 75-65-0)</td>
<td>STEL</td>
<td>150 ppm</td>
</tr>
<tr>
<td>t-Butanol (CAS 75-65-0)</td>
<td>TWA</td>
<td>300 mg/m3</td>
</tr>
<tr>
<td>t-Butanol (CAS 75-65-0)</td>
<td>TWA</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>
### US Workplace Environmental Exposure Level (WEEL) Guides

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2 Butylene Oxide (CAS 106-88-7)</td>
<td>TWA</td>
<td>5.9 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Ethane, 1,1,1,2-tetrafluoro-(hfc-134a) (CAS 811-97-2)</td>
<td>TWA</td>
<td>2 ppm</td>
<td>8 hour</td>
</tr>
<tr>
<td>Ethane, 1,1,1,2-tetrafluoro-(hfc-134a) (CAS 811-97-2)</td>
<td>1000 ppm</td>
<td>8 hour</td>
<td></td>
</tr>
</tbody>
</table>

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Exposure guidelines**

**US - California OELs: Skin designation**
- 1-Propanol (CAS 71-23-8)
- n-Propyl Bromide (CAS 106-94-5)

**US - Minnesota Haz Subs: Skin designation applies**
- 1-Propanol (CAS 71-23-8)

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**
- 1-Propanol (CAS 71-23-8)

**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). Eye wash fountain and emergency showers are recommended.

- **Skin protection**
  - **Hand protection**
    - Viton or nitrile rubber gloves are recommended.
  - **Other**
    - Wear appropriate chemical resistant clothing.

- **Respiratory protection**
  - When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Chemical respirator with organic vapor cartridge.

**Thermal hazards**

Not applicable.

**General hygiene considerations**

When using, do not eat, drink or 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**

- **Physical state**
  - Gas.
- **Form**
  - Aerosol.
- **Color**
  - Clear
- **Odor**
  - Strong.
- **Odor threshold**
  - Not established
- **pH**
  - Not applicable
- **Melting point/freezing point**
  - Not established
- **Initial boiling point and boiling range**
  - 158 °F (70 °C)
- **Flash point**
  - < 73.4 °F (< 23.0 °C) Tag Closed Cup
- **Evaporation rate**
  - 6 BuAc
- **Flammability (solid, gas)**
  - Not applicable.

**Upper/lower flammability or explosive limits**

- **Flammability limit - lower (%)**
  - 4 %
- **Flammability limit - upper (%)**
  - 8 %
- **Explosive limit - lower (%)**
  - Not available.
- **Explosive limit - upper (%)**
  - Not available.
Vapor pressure  > 100 mm Hg @20°C
Vapor density  ~4.3 (air = 1)
Relative density  Not available.

Solubility(ies)
- Solubility (water)  3 - 5 %
- Partition coefficient (n-octanol/water)  > 1

Auto-ignition temperature  > 914 °F (> 490 °C)
Decomposition temperature  Not established

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  Hazardous polymerization does not occur.
Conditions to avoid  Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.

11. Toxicological information

Information on likely routes of exposure
- Inhalation  Irritating to respiratory system. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
- Skin contact  Causes skin irritation.
- Eye contact  Causes serious eye irritation.
- Ingestion  May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics  Irritating to eyes, respiratory system and skin. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause redness and pain. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Behavioral changes. Narcosis. Decrease in motor functions.

Information on toxicological effects
Acute toxicity  Narcotic effects. May cause respiratory irritation.

Components  Species  Test Results

**Acute**
- Dermal
  - LD50  Rabbit  1500 - 2950 mg/kg, 24 Hours

**Inhalation**
- Vapor
  - LC50  Rat  > 6.3 mg/l, 4 Hours

**Oral**
- LD50  Rat  1 - 1.58 mg/kg
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1-Propanol (CAS 71-23-8)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>4032 mg/kg, 24 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>1870 mg/kg</td>
</tr>
<tr>
<td><strong>n-Propyl Bromide (CAS 106-94-5)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg, 24 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td><strong>t-Butanol (CAS 75-65-0)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>3.5 g/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
Causes skin irritation.

**Serious eye damage/eye irritation**
Causes serious eye irritation.

**Respiratory or skin sensitization**

| 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**
Suspected of causing cancer.

| ACGIH Carcinogens | | |
| 1-Propanol (CAS 71-23-8) | A4 Not classifiable as a human carcinogen. |
| n-Propyl Bromide (CAS 106-94-5) | A3 Confirmed animal carcinogen with unknown relevance to humans. |
| t-Butanol (CAS 75-65-0) | A4 Not classifiable as a human carcinogen. |

| IARC Monographs. Overall Evaluation of Carcinogenicity | | |
| 1,2 Butylene Oxide (CAS 106-88-7) | 2B Possibly carcinogenic to humans. |
| n-Propyl Bromide (CAS 106-94-5) | 2B Possibly carcinogenic to humans. |

| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052) | | |
| Not regulated. |

| US. National Toxicology Program (NTP) Report on Carcinogens | | |
| n-Propyl Bromide (CAS 106-94-5) | Reasonably Anticipated to be a Human Carcinogen. |

**Reproductive toxicity**
May damage fertility or the unborn child.

**Specific target organ toxicity - single exposure**
May cause respiratory irritation. May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**
May cause damage to organs (Liver, Central Nervous System) through prolonged or repeated exposure.

**Aspiration hazard**
Not an aspiration hazard.

**Chronic effects**
May cause damage to organs through prolonged or repeated exposure.

**Further information**
Symptoms may be delayed.

**12. Ecological information**

<p>| Ecotoxicity | Harmful to aquatic life with long lasting effects. |</p>
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Propanol (CAS 71-23-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna) 3339 - 3977 mg/l, 48 hours</td>
</tr>
</tbody>
</table>
Components | Species | Test Results
--- | --- | ---
Fish | LC50 | Bleak (Alburnus alburnus) 3000 - 4000 mg/l, 96 hours

**Aquatic**

n-Propyl Bromide (CAS 106-94-5)

Fish | LC50 | Fathead minnow (Pimephales promelas) 67.3 mg/l, 96 hours

**Aquatic**

t-Butanol (CAS 75-65-0)

Crustacea | EC50 | Water flea (Daphnia magna) 4607 - 6577 mg/l, 48 hours

Fish | LC50 | Fathead minnow (Pimephales promelas) 6130 - 6700 mg/l, 96 hours

**Persistence and degradability**

Not inherently biodegradable.

**Bioaccumulative potential**

Not available.

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPS® NoFlash</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>1-Propanol</td>
<td>0.25</td>
</tr>
<tr>
<td>Ethane, 1,1,1,2-tetrafluoro-(hfc-134a)</td>
<td>1.06</td>
</tr>
<tr>
<td>n-Propyl Bromide</td>
<td>2.1</td>
</tr>
<tr>
<td>t-Butanol</td>
<td>0.35</td>
</tr>
</tbody>
</table>

**Mobility in soil**

Readily absorbed into soil.

**Other adverse effects**

None known.

13. **Disposal considerations**

**Disposal instructions**
Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. 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**
D001: Waste Flammable material with a flash point < 140 F
D003: Waste Reactive material

**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**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. **Transport information**

**DOT**

**UN number**
UN1950

**UN proper shipping name**
Aerosols, non-flammable, (each not exceeding 1 L capacity)

**Transport hazard class(es)**
Class: 2.2

**Special precautions for user**
Not available.

**Packing exceptions**
306

**Packaging non bulk**
None

**Packaging bulk**
None

**IATA**

**UN number**
UN1950

**UN proper shipping name**
Aerosols, non-flammable

**Transport hazard class(es)**
Class: 2.2

**Special precautions for user**
Not available.
Other information
- Passenger and cargo aircraft: Allowed with restrictions.
- Cargo aircraft only: Allowed with restrictions.

IMDG
- UN number: UN1950
- UN proper shipping name: AEROSOLS, non-flammable
- Transport hazard class(es):
  - Class: 2.2
  - Subsidiary risk: -
  - Label(s): 2.2
- Packing group: Not available.
- Environmental hazards: Not available.
- Marine pollutant: No.
- EmS: F-D, S-U
- Special precautions for user: Not available.
- 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.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
1,2 Butylene Oxide (CAS 106-88-7) Listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical

Material name: LPS® NoFlash

04016 Version #: 02 Revision date: 02-13-2018 Issue date: 05-26-2016
SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-BUTYLENE OXIDE</td>
<td>106-88-7</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>1-BROMOPROPANE</td>
<td>106-94-5</td>
<td>60 - 70</td>
</tr>
</tbody>
</table>

Other federal regulations

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

1,2 Butylene Oxide (CAS 106-88-7)

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

Not regulated.

Safe Drinking Water Act (SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

1-Propanol (CAS 71-23-8) Low priority

US state regulations

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

1,2 Butylene Oxide (CAS 106-88-7)
1-Propanol (CAS 71-23-8)
n-Propyl Bromide (CAS 106-94-5)
t-Butanol (CAS 75-65-0)

California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

California Proposition 65 - CRT: Listed date/Carcinogenic substance
n-Propyl Bromide (CAS 106-94-5) Listed: August 5, 2016

California Proposition 65 - CRT: Listed date/Developmental toxin
n-Propyl Bromide (CAS 106-94-5) Listed: December 7, 2004

California Proposition 65 - CRT: Listed date/Female reproductive toxin
n-Propyl Bromide (CAS 106-94-5) Listed: December 7, 2004

California Proposition 65 - CRT: Listed date/Male reproductive toxin
n-Propyl Bromide (CAS 106-94-5) Listed: December 7, 2004

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

1,2 Butylene Oxide (CAS 106-88-7)
n-Propyl Bromide (CAS 106-94-5)
t-Butanol (CAS 75-65-0)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Toxic Chemical Substances (TCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply 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).
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.

Composition / Information on Ingredients: Disclosure Overrides
Physical and chemical properties: Appearance
GHS: Qualifiers