



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 | |
| Manufacturer | |
| Company name | ITW Pro Brands |
| Address | 4647 Hugh Howell Rd. Tucker, GA 30084 |
| Country | (U.S.A.) 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 | Liquefied gas |
| Health hazards | 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

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|--------------------------|------------|---------|
| n-Propyl Bromide | | 106-94-5 | 60 - 70 |
| Ethane, 1,1,1,2-tetrafluoro-(hfc-134a) | | 811-97-2 | 30 - 40 |
| 1-Propanol | | 71-23-8 | 1 - 5 |
| 1,2 Butylene Oxide | | 106-88-7 | < 1 |
| t-Butanol | | 75-65-0 | < 1 |

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 | Powder. Alcohol resistant foam. Water spray. Carbon dioxide (CO ₂). |
| 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. |
| 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. |

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. Use personal protection recommended in Section 8 of the SDS.

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. 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. For waste disposal, see section 13 of the SDS.

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. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

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

| Components | Type | Value |
|--------------------------|------|----------------------|
| 1-Propanol (CAS 71-23-8) | PEL | 500 mg/m3 200 ppm |
| t-Butanol (CAS 75-65-0) | PEL | 300 mg/m3 100 ppm |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|---------------------------------|------|---------|
| 1-Propanol (CAS 71-23-8) | TWA | 100 ppm |
| n-Propyl Bromide (CAS 106-94-5) | TWA | 0.1 ppm |
| t-Butanol (CAS 75-65-0) | TWA | 100 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|--------------------------|------|----------------------|
| 1-Propanol (CAS 71-23-8) | STEL | 625 mg/m3 250 ppm |
| | TWA | 500 mg/m3 200 ppm |
| t-Butanol (CAS 75-65-0) | STEL | 450 mg/m3 150 ppm |
| | TWA | 300 mg/m3 100 ppm |

US. Workplace Environmental Exposure Level (WEEL) Guides

| Components | Type | Value | Form |
|---|------|-------------------|--------|
| 1,2 Butylene Oxide (CAS 106-88-7) | TWA | 5.9 mg/m3 | |
| Ethane, 1,1,1,2-tetrafluoro-(hfc-134a) (CAS 811-97-2) | TWA | 2 ppm 1000 ppm | 8 hour |

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) Can be absorbed through the skin.
n-Propyl Bromide (CAS 106-94-5) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

1-Propanol (CAS 71-23-8) Skin designation applies.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

1-Propanol (CAS 71-23-8) 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). 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 | Liquid. |
| 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 |
| Viscosity | Not available. |
| Other information | |
| Heat of combustion | 12 kJ/g |
| Percent volatile | 100 % |
| Specific gravity | 1.29 - 1.32 @20°C |
| VOC | 70.1 % per US State and Federal Consumer Product Regulations |

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. |
| Incompatible materials | Aluminum. Alkali earth metals. Alkaline metals. |
| Hazardous decomposition products | Carbon oxides. Hydrogen bromide. Hydrogen fluoride. |

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 |
|-----------------------------------|---------|---|
| 1,2 Butylene Oxide (CAS 106-88-7) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 1500 - 2950 mg/kg, 24 Hours 1.77 ml/kg, 24 Hours |
| Inhalation | | |
| LC100 | Rat | 8000 ppm, 4 Hours |
| <i>Vapor</i> | | |
| LC50 | Rat | > 6.3 mg/l |
| Oral | | |
| LD50 | Rat | 1 - 1.58 mg/kg 1100 µl/kg |

| Components | Species | Test Results |
|--|--|---|
| | | 1.3 ml/kg |
| 1-Propanol (CAS 71-23-8) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | 4032 mg/kg, 24 Hours |
| Inhalation | | |
| <i>Vapor</i> | | |
| LC50 | Rat | > 13548 ppm, 4 Hours > 26.76 mg/l, 7 Hours > 9.8 mg/ml, 4 Hours |
| Oral | | |
| LD50 | Mouse | 6800 mg/kg |
| | Rabbit | 2.8 g/kg |
| | Rat | 1870 mg/kg |
| | | 1.87 g/kg |
| n-Propyl Bromide (CAS 106-94-5) | | |
| Acute | | |
| Dermal | | |
| LD50 | Rabbit | >= 10 ml/kg, 24 Hours |
| | Rat | > 2000 mg/kg, 24 Hours |
| Inhalation | | |
| <i>Vapor</i> | | |
| LC50 | Rat | 35000 mg/m3, 4 Hours |
| LC50 | Rat | 14374 ppm, 4 Hours 7000 mg/l, 4 Hours 253 mg/l, 30 Minutes |
| <i>Vapor</i> | | |
| LC50 | Rat | 25 - 35 mg/l, 6 Hours |
| Oral | | |
| LD50 | Rabbit | 540 mg/kg |
| | Rat | > 2000 mg/kg |
| t-Butanol (CAS 75-65-0) | | |
| Acute | | |
| Oral | | |
| LD50 | Rabbit | 3.6 g/kg |
| | Rat | 3.5 g/kg |
| 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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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

Ecotoxicity Harmful to aquatic life with long lasting effects.

| Components | | Species | Test Results |
|---------------------------------|------|--------------------------------------|----------------------------|
| 1-Propanol (CAS 71-23-8) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 3339 - 3977 mg/l, 48 hours |
| Fish | LC50 | Bleak (Alburnus alburnus) | 3000 - 4000 mg/l, 96 hours |
| n-Propyl Bromide (CAS 106-94-5) | | | |
| Aquatic | | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | 67.3 mg/l, 96 hours |
| t-Butanol (CAS 75-65-0) | | | |
| Aquatic | | | |
| 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)

| | |
|--|------|
| LPS® NoFlash | > 1 |
| 1-Propanol | 0.25 |
| Ethane, 1,1,1,2-tetrafluoro-(hfc-134a) | 1.06 |
| n-Propyl Bromide | 2.1 |
| t-Butanol | 0.35 |

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 |
| Subsidiary risk | - |
| Label(s) | 2.2 |
| Packing group | Not applicable. |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Packaging 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 |
| Subsidiary risk | - |
| Packing group | Not applicable. |
| Environmental hazards | No. |
| ERG Code | 2L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| 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 applicable. |
| Environmental hazards | |
| Marine pollutant | No. |
| EmS | F-D, S-U |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |

DOT





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 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - No

Pressure Hazard - Yes

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|--------------------|------------|----------|
| 1,2-BUTYLENE OXIDE | 106-88-7 | < 1 |

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)

Not regulated.

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

1-Propanol (CAS 71-23-8)

Low priority

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

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)

US. Massachusetts RTK - Substance List

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)

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)

US. Pennsylvania Worker and Community Right-to-Know Law

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)

US. Rhode Island RTK

1,2 Butylene Oxide (CAS 106-88-7)
t-Butanol (CAS 75-65-0)

US. California Proposition 65

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

US - California Proposition 65 - CRT: Listed date/Developmental toxin

n-Propyl Bromide (CAS 106-94-5) Listed: December 7, 2004

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

n-Propyl Bromide (CAS 106-94-5) Listed: December 7, 2004

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

n-Propyl Bromide (CAS 106-94-5) Listed: December 7, 2004

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) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*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).

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

Issue date 05-26-2016

Version # 01

Disclaimer 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.

Revision information This document has undergone significant changes and should be reviewed in its entirety.