

Issue date 06-Jun-2018

Revision date 17-Oct-2018

Revision Number 2

1. IDENTIFICATION

Product identification

Product identifier	Lawson Powr On Electrical Contact Cleaner
Other means of identification	53858
Recommended use	Cleaner, Degreaser
Restrictions on use	For industrial use only

Supplier

Corporate Headquarters:
Lawson Products, Inc.
8770 W. Bryn Mawr Ave., Suite 900
Chicago, IL 60631
(866) 837-9908

Canadian Distribution Center:
Lawson Canada
7315 Rapistan Court
Mississauga, ON L5N 5Z4
(800) 323-5922

24 Hour Emergency Phone Number (888) 426-4851 (Prosar)

2. HAZARD(S) IDENTIFICATION

Hazard Classification This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1B
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable aerosols	Category 1
Gases under pressure	Liquefied Gas

Symbol



Signal word DANGER

Hazard statements H222 - Extremely flammable aerosol

H280 - Contains gas under pressure; may explode if heated
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H350 - May cause cancer
H360 - May damage fertility or the unborn child
H315 - Causes skin irritation
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements

General

P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P103 - Read label before use.

Prevention

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source
P251 - Pressurized container: Do not pierce or burn, even after use
P280 - Wear protective gloves/protective clothing and eye/face protection
P264 - Wash face, hands and any exposed skin thoroughly after handling
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area

Response

General

P308 + P313 - IF exposed or concerned: Get medical advice/attention
P321 - For Specific treatment see section 4 of this sds

Eyes

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician

Skin

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse

Inhalation

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell

Storage

P405 - Store locked up
P410 - Protect from sunlight
P412 - Do not expose to temperatures exceeding 50 °C/122 °F
P403 - Store in a well-ventilated place
P233 - Keep container tightly closed

Disposal

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Hazard(s) Not Otherwise Classified (HNOC)

None known.

Physical Hazards Not Otherwise Classified (PHNOC)

May be harmful if swallowed. May be harmful if inhaled.

Unknown acute toxicity

3%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Mixture.

Chemical name	CAS-No	Weight %
n-Propyl bromide	106-94-5	65-75
1,1,1,2-Tetrafluoroethane	811-97-2	5-10
n-Propyl alcohol	71-23-8	1-5
1,2-Butylene oxide	106-88-7	0.1-1
Carbon Dioxide	124-38-9	<1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or environment and hence require reporting in this section

4. FIRST-AID MEASURES

Necessary first-aid measures

General Information

Show this safety data sheet to the doctor in attendance. Get immediate medical advice/attention. Chemical burns must be treated promptly by a physician. IF exposed or concerned: Get medical advice/attention.

Inhalation

Remove to fresh air. Get medical attention immediately. Call a POISON CENTER or doctor. IF exposed or concerned: Get medical advice/attention.

Ingestion

Call a POISON CENTER or doctor. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

Skin contact

Get medical attention immediately. Call a POISON CENTER or doctor. Flush area with large quantities of water. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Treat burned or frostbitten skin by flushing or immersing affected areas in lukewarm water. If skin is not burned, keep area warm and stimulate circulation with gentle massage.

Eye contact

Get medical attention immediately. Call a POISON CENTER or doctor. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Chemical burns must be treated promptly by a physician. Do not rub eye.

Most important symptoms (acute)

Causes serious eye irritation. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. May cause skin irritation. Irritating to mouth, throat and stomach.

Most important symptoms (over-exposure)

Adverse symptoms may include the following: eye pain, redness, and watering. Respiratory tract irritation. Coughing. Skin pain, irritation, redness, and blistering may occur. Ingestion may cause stomach pains. Burning sensation of eyes. Headache. Dizziness. Drowsiness/fatigue. Nausea or vomiting.

Indication of any immediate medical attention and special treatment needed

In case of inhalation of decomposition products in a fire, symptoms maybe delayed. The exposed person may need to be kept under medical surveillance for 48 hours. No action shall be taken involving any personal risk or without suitable training. If it is suspected that vapors or fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry Chemical, Carbon Dioxide, Foam or Water Fog.
Unsuitable extinguishing media	None known.
Specific hazards	In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Hazardous Thermal Decomposition Products: Carbon dioxide. Carbon monoxide. Halogenated compounds. carbonyl halides.
Special protective equipment for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if you can do it without risk. Use water spray to keep fire-exposed containers cool. Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering the area. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Do not breathe vapors or spray mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information for 'non-emergency personnel'. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containment and cleaning up	Take precautionary measures against static discharges. Stop leak if possible and move containers from the spill area. Water soluble: dilute with water and mop up. Water insoluble: Cover spill area with a suitable absorbent inert material (Kitty Litter, Oil-Dri, etc.) and dispose of in an appropriate metal waste container. Dispose of material through a licensed waste disposal contractor. Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry in sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. See section 1 for emergency contact information and section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for safe handling	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use spark-proof tools and explosion proof equipment. Put on appropriate personal protective equipment (see section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes and clothing. Do not take internally. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Empty containers retain product residue and can be hazardous. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove
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contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in accordance with local regulations. Store away from direct sunlight in dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Protect from sunlight. Store locked up. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
n-Propyl bromide	-	0.1 ppm TWA	-
1,1,1,2-Tetrafluoroethane	-	-	-
n-Propyl alcohol	200 ppm TWA 500 mg/m ³ TWA	100 ppm TWA	250 ppm STEL 625 mg/m ³ STEL 200 ppm TWA 500 mg/m ³ TWA
1,2-Butylene oxide	-	-	-
Carbon Dioxide	5000 ppm TWA 9000 mg/m ³ TWA	30000 ppm STEL 5000 ppm TWA	30000 ppm STEL 54000 mg/m ³ STEL 5000 ppm TWA 9000 mg/m ³ TWA

Appropriate engineering controls

A safety shower and eye wash station should be available for emergency use. Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures, such as personal protective equipment

Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin and body protection

Chemical-resistant, impervious gloves (Nitrile or Viton) complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use the the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Canadian Province Occupational Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick - OEL	Newfoundland and Labrador - OEL	Nova Scotia - OEL	Ontario OEL	Prince Edward Island - OEL	Quebec OEL	Saskatchewan - OEL
n-Propyl bromide	10 ppm TWA 50 mg/m ³ TWA	10 ppm TWA	0.1 ppm TWA	-	0.1 ppm TWA	0.1 ppm TWA	0.1 ppm TWA	0.1 ppm TWA	-	20 ppm STEL 10 ppm TWA
1,1,1,2-Tetrafluoroethane	-	-	-	-	-	-	-	-	-	-
n-Propyl alcohol	400 ppm STEL 984 mg/m ³ STEL 200 ppm TWA 492 mg/m ³ TWA	100 ppm TWA	100 ppm TWA	250 ppm STEL 614 mg/m ³ STEL 200 ppm TWA 492 mg/m ³ TWA	100 ppm TWA	100 ppm TWA	100 ppm TWA	100 ppm TWA	250 ppm STEV 614 mg/m ³ STEV 200 ppm TWA 492 mg/m ³ TWA	400 ppm STEL 200 ppm TWA
1,2-Butylene oxide	-	-	-	-	-	-	-	-	-	-
Carbon Dioxide	30000 ppm STEL 54000 mg/m ³ STEL 5000 ppm TWA 9000 mg/m ³ TWA	15000 ppm STEL 5000 ppm TWA	5000 ppm TWA 30000 ppm STEL	30000 ppm STEL 54000 mg/m ³ STEL 5000 ppm TWA 9000 mg/m ³ TWA	30000 ppm STEL 5000 ppm TWA	30000 ppm STEL 5000 ppm TWA	30000 ppm STEL 5000 ppm TWA	30000 ppm STEL 5000 ppm TWA	30000 ppm STEV 54000 mg/m ³ STEV 5000 ppm TWA 9000 mg/m ³ TWA	30000 ppm STEL 5000 ppm TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Colorless
Odor	Characteristic
Odor threshold	Not available
pH	Not available
Melting point/range °C	Not available
Melting point/range °F	Not available
Boiling point/range °C	70 °C
Boiling point/range °F	158 °F
Flash point °C / °F	Not available
Evaporation rate	No data available

Flammability (Solid, Gas)	Extremely Flammable Aerosol
Lower explosion limit	Not available
Upper explosion limit	Not available
Vapor pressure	No data available
Vapor density	Not available
Relative density	1.29-1.32 @20°C
Solubility	3-5%
Partition coefficient (n-octanol/water)	Not available
Autoignition temperature °C	Not available
Autoignition temperature °F	Not available
Decomposition temperature °C	Not available
Decomposition temperature °F	Not available
Viscosity	Not available

10. STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	Stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such contents to heat, flames, and other sources of ignition. Keep from excessive heat.
Incompatible materials	Incompatible with strong acids and bases. Oxidizing agents.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Dermal. Inhalation. Ingestion. Eyes.
Symptoms	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Causes serious eye damage. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. May cause skin irritation. May cause burns to mouth, throat and stomach. Adverse symptoms may include the following: eye pain, redness, and watering. Coughing. Respiratory tract irritation. Skin pain, irritation, redness, and blistering may occur. Ingestion may cause stomach pains. May cause irreversible damage to eyes.
Delayed and immediate effects	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

as well as chronic effects from short and long-term exposure

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
n-Propyl bromide	= 14374 ppm (Rat) 4 h = 253 g/m ³ (Rat) 30 min	> 2000 mg/kg (Rat)	= 3600 mg/kg (Rat) > 2000 mg/kg (Rat)
1,1,1,2-Tetrafluoroethane	= 1500 g/m ³ (Rat) 4 h	-	-
n-Propyl alcohol	> 13548 ppm (Rat) 4 h	= 4049 mg/kg (Rabbit)	= 1870 mg/kg (Rat)
1,2-Butylene oxide	> 6300 mg/m ³ (Rat) 4 h	1255 - 2546 mg/kg (Rabbit)	= 500 mg/kg (Rat) = 900 mg/kg (Rat)
Carbon Dioxide	-	-	-

ATEmix (dermal) Not available

ATEmix (oral) Not available

ATEmix (inhalation-gas) Not available

ATEmix (inhalation-vapor) Not available

ATEmix (inhalation-dust/mist) Not available

Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA RTK Carcinogens	NTP
n-Propyl bromide	A3	Group 2B	Listed	Reasonably Anticipated
1,1,1,2-Tetrafluoroethane	-	-	-	-
n-Propyl alcohol	A4	-	-	-
1,2-Butylene oxide	-	Group 2B	Listed	-
Carbon Dioxide	-	-	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
n-Propyl bromide	-	-	ACGIH A3	-	ACGIH A3	-
1,1,1,2-Tetrafluoroethane	-	-	-	-	-	-
n-Propyl alcohol	-	-	ACGIH A4	-	ACGIH A4	-
1,2-Butylene oxide	-	-	-	-	-	-
Carbon Dioxide	-	-	-	-	-	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish
n-Propyl bromide	-	67.3: 96 h Pimephales promelas mg/L LC50 flow-through
1,1,1,2-Tetrafluoroethane	-	-
n-Propyl alcohol	-	4480: 96 h Pimephales promelas mg/L LC50 flow-through
1,2-Butylene oxide	500: 72 h Desmodesmus subspicatus mg/L EC50	100 - 220: 96 h Leuciscus idus mg/L LC50 static
Carbon Dioxide	-	-

Persistence and degradability Not available.

Bioaccumulation

Chemical name	CAS-No	Partition coefficient (log Kow)
n-Propyl bromide 106-94-5	106-94-5	2.1
1,1,1,2-Tetrafluoroethane 811-97-2	811-97-2	-
n-Propyl alcohol 71-23-8	71-23-8	0.25 - 0.34
1,2-Butylene oxide 106-88-7	106-88-7	0.416
Carbon Dioxide 124-38-9	124-38-9	-

Mobility in soil Not available.

Other adverse effects No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Disposal information

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Contaminated packaging

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its containers must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT

ID-No UN1950
 Proper shipping name Aerosols
 Hazard Class(es) 2.1
 Packing group
 Special Provisions LTD QTY

TDG

ID-No UN1950

Proper shipping name Aerosols
Hazard Class(es) 2.1
Packing group
Special Provisions LTD QTY

IATA

ID-No UN1950
Proper shipping name Aerosols, flammable
Hazard Class(es) 2.1
Subsidiary Risk
Packing group
Special Provisions LTD QTY

IMDG/IMO

ID-No UN1950
Proper shipping name Aerosols
Hazard Class(es) 2
Packing group
EmS No F-D, S-U
Special Provisions LTD QTY

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
n-Propyl bromide	106-94-5	-	-	-
1,1,1,2-Tetrafluoroethane	811-97-2	-	-	-
n-Propyl alcohol	71-23-8	-	-	-
1,2-Butylene oxide	106-88-7	-	-	-
Carbon Dioxide	124-38-9	-	-	-

Special Precautions

Multi-modal shipping descriptions are provided for informational purposes and do not consider container size. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. REGULATORY INFORMATION

State regulations**U.S. state Right-to-Know regulations**

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
n-Propyl bromide	106-94-5	X	X	X
1,1,1,2-Tetrafluoroethane	811-97-2	-	-	-
n-Propyl alcohol	71-23-8	X	X	X
1,2-Butylene oxide	106-88-7	X	X	X
Carbon Dioxide	124-38-9	X	X	X

California Prop. 65

WARNING: This product contains a chemical(s) known to the state of California to cause cancer, birth defects or other reproductive harm

Chemical name	CAS-No	California Prop. 65
n-Propyl bromide	106-94-5	Carcinogen Developmental Female Reproductive Male Reproductive
1,1,1,2-Tetrafluoroethane	811-97-2	-
n-Propyl alcohol	71-23-8	-
1,2-Butylene oxide	106-88-7	-
Carbon Dioxide	124-38-9	-

U.S. Federal Regulations**US EPA SARA 313**

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
n-Propyl bromide	106-94-5	-	0.1 %
1,1,1,2-Tetrafluoroethane	811-97-2	-	-
n-Propyl alcohol	71-23-8	-	-
1,2-Butylene oxide	106-88-7	100 lb 45.4 kg	0.1 %
Carbon Dioxide	124-38-9	-	-

**US EPA SARA 311/312
hazardous categorization**

Acute Health Hazard
Chronic Health Hazard

International inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA 8(b)), Canada (DSL/NDSL) or are exempt.

Chemical name	DSL/NDSL	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification
n-Propyl bromide	X	X	-
1,1,1,2-Tetrafluoroethane	X	X	-
n-Propyl alcohol	X	X	-
1,2-Butylene oxide	X	X	-
Carbon Dioxide	X	X	-

Legend X - Listed

16. OTHER INFORMATION**NFPA**

Health 3
Flammability 4
Instability 0

HMIS

Health 3 *

Flammability	4
Physical hazards	0
Personal protection	X

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by Regulatory Affairs

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Revision note

Key to abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists)
ATE (Average Toxicity Estimate)
DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
HMIS (Hazardous Materials Identification System)
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG/IMO (International Maritime Dangerous Goods/International Maritime Organization)
NFPA (National Fire Protection Association)
NTP (National Toxicology Program)
OEL (Occupational Exposure Level)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
TSCA (Toxic Substance Control Act)
USEPA (United States Environmental Protection Agency)

Disclaimer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

End of Safety Data Sheet