

# CHEMTRONICS<sup>®</sup>

## Technical Data Sheet

**TDS # 1626**

### DPL<sup>®</sup> Lubricant

#### Deep Penetrating Lubricant

#### PRODUCT DESCRIPTION

DPL<sup>®</sup> Lubricant is specially engineered to clean, displace moisture, inhibit corrosion, reduce friction and protect metal surfaces in one easy step. Formulated to provide long-lasting protection and improved performance to electrical and electronic contacts, DPL<sup>®</sup> Lubricant is the extra-strength multi-purpose lubricant that provides a long-lasting film that protects metals from corrosion under the most extreme conditions. DPL<sup>®</sup> Lubricant is registered with the NSF as an H2 lubricant for use in and around food processing areas.

- Cleans, protects, and lubricates all electrical and electronic switches, contacts, relays, plugs, and sockets
- Can be used in applications exposed to extreme weather conditions
- Displaces moisture from electrical and electronic components
- NSF H2 Registered
- Minimizes friction and metal wear
- Excellent corrosion protection under high humidity and salt spray conditions
- Loosens rusted cabinets and hinges
- Works on most metals, even aluminum
- Contains special corrosion inhibitors for long-term protection

#### TYPICAL APPLICATIONS

DPL<sup>®</sup> Lubricant effectively cleans and lubricates:

- Electrical and electronic contacts
- Potentiometers and rheostats
- Solenoids
- Electrical equipment
- Meters and test equipment
- Controllers
- Motors, generators and compressors
- Bearings, chains, cables, pulleys and gear drives

#### TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

|                                               |                     |
|-----------------------------------------------|---------------------|
| <b>Boiling Point</b>                          | 500° F<br>(Initial) |
| <b>Evaporation Rate<br/>(butyl acetate=1)</b> | <1                  |
| <b>Flash Point (TCC)</b>                      | 280° F              |
| <b>Specific Gravity</b>                       | 0.83                |
| <b>Vapor Pressure @68°F<br/>mmHg</b>          | <0.01               |
| <b>Appearance</b>                             | Light amber liquid  |
| <b>Odor</b>                                   | Mild                |
| <b>Solubility in Water</b>                    | Negligible          |
| <b>Dielectric Breakdown<br/>(ASTM D-877)</b>  | 43 kV               |
| <b>KB value</b>                               | 23.8                |
| <b>Shelflife</b>                              | 5 years             |
| <b>NSF-Registered H2</b>                      | #139464             |

#### COMPATIBILITY

DPL<sup>®</sup> Lubricant is generally compatible with most materials used in electrical and electronic assemblies. As with any chemical, compatibility should be checked on a non-critical area prior to use.

| <u>Material</u> | <u>Compatibility</u> |
|-----------------|----------------------|
| ABS             | Excellent            |
| Buna-N          | Excellent            |
| EPDM            | Excellent            |
| Graphite        | Excellent            |
| HDPE            | Excellent            |
| LDPE            | Excellent            |
| Lexan™          | Excellent            |
| Neoprene        | Excellent            |
| Nylon™ 66       | Excellent            |
| Cross-Linked PE | Excellent            |
| Polypropylene   | Excellent            |
| Polystyrene     | Excellent            |
| PVC             | Excellent            |
| Silicone Rubber | Excellent            |
| Teflon™         | Excellent            |

## AVAILABILITY

ES1626 11 oz. Aerosol

## ENVIRONMENTAL IMPACT DATA

### ENVIRONMENTAL IMPACT DATA

|           |      |     |      |
|-----------|------|-----|------|
| CFC       | 0.0% | VOC | 0.0% |
| HCFC-225  | 0.0% | nPB | 0.0% |
| HCFC-141b | 0.0% | HFC | 0.0% |

CFC, HCFC-225, HCFC-141b, VOC, HFC, and nPB percentages shown are the content by weight.

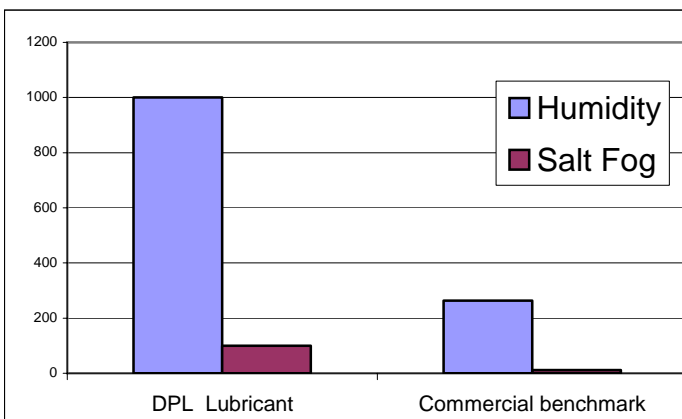
### NOTE:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. ITW CHEMTRONICS® does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

## Performance

### Rust/Corrosion Protection (ASTM B 117-95)

|                      |                                       |
|----------------------|---------------------------------------|
| DPL® Lubricant       | 1000 hrs / 100% RH at 120° F          |
| Commercial benchmark | 264 hrs / 100% RH at 120° F           |
| DPL® Lubricant       | 100 hrs / 100% RH w/ 5% salt at 95° F |
| Commercial benchmark | 12 hrs / 100% RH w/ 5% salt at 95° F  |



## USAGE INSTRUCTIONS

For commercial use only.

Read MSDS carefully prior to use.

Shake before using. Spray 4-6 inches from surface to be lubricated or protected. For precise application use attached extension tube.

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**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Information: 800-TECH-401

**Product Identification****DPL Lubricant**

Product Code: ES1626

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name        | CAS No.    | Wt. % Range |
|----------------------|------------|-------------|
| Petroleum distillate | 64742-46-7 | 80.0-90.0   |
| Naphthenic oil       | 64742-52-5 | 10.0-20.0   |
| Carbon dioxide       | 124-38-9   | 1.0-10.0    |

**SECTION 3: HAZARD IDENTIFICATION**

**Emergency Overview:** Clear, colorless liquid with mild hydrocarbon odor. This product is flammable. Liquid will irritate eyes and skin under repeated or prolonged exposure. Breathing high concentrations of product may produce drowsiness and a headache.

**Potential Health Effects:**

**Eyes:** Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation.

**Skin:** Contact may cause skin irritation.

**Ingestion:** Harmful if swallowed. Irritating to the mouth, throat and stomach. May cause vomiting. Aspiration into the lungs may cause mild to severe pulmonary injury and possibly death.

**Inhalation:** Harmful if inhaled in high concentrations. Vapors can displace oxygen and cause dizziness, unconsciousness and even death, with longer exposure.

**Pre-Existing Medical Conditions Aggravated by Exposure:** Heart, lung, skin, eye.

**SECTION 4: FIRST AID MEASURES**

**Eyes:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel if irritation develops or persists.

**Skin:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**Ingestion:** If swallowed, do not induce vomiting. Keep head below knees to minimize chance of aspirating material into the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

**Flash Point:** 280° F (138C) TCC      **Flame extension** > 18 inches      **LEL/UEL:** (% by volume in air)

**Extinguishing Media:** Use alcohol foam, carbon dioxide or water spray when fighting fires involving this material.

**Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus (pressure demand, MSHA/NIOSH approved or equivalent) and full protective gear.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Large Spills:** Shut off leak if possible and safe to do so. Wear a self-contained breathing apparatus and appropriate personal protective equipment. Absorb spill with inert material (i.e. dry sand or earth), then place in a chemical waste container for proper disposal. Do not flush to sewer. Avoid runoff into storm sewers and ditches that lead to waterways.

**Small Spills:** Absorb spill with inert material (i.e. dry sand or earth), then place in a chemical waste container for proper disposal.

**SECTION 7: HANDLING AND STORAGE**

Avoid prolonged or repeated contact with skin, eyes or clothing. Wash hands before eating. Use with adequate ventilation. Avoid breathing product vapor. Do not reuse this container. Store in a cool dry place, away from heat, sparks or flames. Do not store in direct sunlight.

**KEEP OUT OF REACH OF CHILDREN.****SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines:**

| CHEMICAL NAME                   | ACGIH TLV           | OSHA PEL            | ACGIH STEL           | OTHER |
|---------------------------------|---------------------|---------------------|----------------------|-------|
| Petroleum distillate (oil mist) | 5 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> |       |
| Naphthenic oil (oil mist)       | 5 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> |       |

**Work/Hygienic Practices:** Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. If vapor concentration exceeds TLV, use NIOSH approved organic vapor cartridge respirator. Wear safety glasses with side shields, goggles and rubber or other chemically resistant gloves when handling this material.

**NFPA and HMIS Codes:**

|                     | NFPA | HMIS |
|---------------------|------|------|
| Health              | 2    | 2    |
| Flammability        | 2    | 2    |
| Reactivity          | 0    | 0    |
| Personal Protection | -    | B    |

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Pale amber liquid

**Odor:** Mild hydrocarbon solvent

**pH:** NA

**Vapor Pressure:** <0.01 mmHg @ 68 F (liquid)

**Vapor Density:** Heavier than air

**Boiling Point:** 500 to 600F (260 to 316C)

**Solubility in Water:** Negligible

**Specific Gravity:** 0.83 @ 68F

**Evaporation Rate:** Negligible

(Butyl acetate=1)

**Percent Volatile:** 0.0%

**SECTION 10: STABILITY AND REACTIVITY**

**Stability:** This product is stable. **Conditions to Avoid:** Do not spray near open flames, red hot surfaces or other sources of ignition.

**Incompatibility:** Do not mix powdered alkali and alkaline earth metals or strong oxidizing agents.

**Products of Decomposition:** Thermal decomposition may release carbon monoxide, carbon dioxide and incompletely burned hydrocarbons.

**Hazardous Polymerization:** Will not occur.

**Conditions to avoid:** NA

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Inhalation:**

Not available

**Skin:**

Not available

\*Information from manufacturer

**Cancer Information:** No ingredients over 0.1% listed as human carcinogens by NTP or IARC

**Reproductive effects:** none

**Teratogenic effects:** none

**Mutagenic effects:** none

**Ingestion:**

Not available

**Eyes:**

Not available

**SECTION 12: ECOLOGICAL INFORMATION****Environmental Impact Information**

Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

**REPORTING**

US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is: **1-800-424-8802**

**SECTION 13: DISPOSAL CONSIDERATION**

Dispose of in accordance with all federal, state and local regulations. Water runoff can cause environmental damage.

**SECTION 14: TRANSPORTATION INFORMATION**

|                | Proper Shipping Name        | UN Number | Class | Sub. Risk | Pkg. Group | Hazard Label  | Pkg. Instr. | Max. Quantity |
|----------------|-----------------------------|-----------|-------|-----------|------------|---------------|-------------|---------------|
| <b>Air:</b>    | Aerosols flammable          | UN 1950   | 2.1   | NA        | NA         | Flammable Gas | 203         | 75/150kg      |
| <b>Ground:</b> | Consumer Commodity<br>ORM-D | NA        | ORM-D | NA        | NA         | ORM-D         | Pkg. Auth.  | 173.306       |

**SECTION 15: REGULATORY INFORMATION**

**SECTION 313 SUPPLIER NOTIFICATION** This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

This information should be included on all MSDSs copied and distributed for this material.

**TOXIC SUBSTANCES CONTROL ACT (TSCA).** All ingredients of this product are listed on the TSCA Inventory.

**WHMIS:** Class A; Class B3; Class D2B

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**SECTION 16: OTHER INFORMATION**

This is a Level 2 aerosol. Do not puncture or incinerate containers. Normal ventilation for standard manufacturing practices is usually adequate.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.