

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**
**PRODUCT NAME:** TDUX and RDSS Lubricant

**MANUFACTURER:** Tyco Electronics Corporation  
**DIVISION:** Tyco Electronics Telecom OSP  
**ADDRESS:** 8000 Purfoy Road  
 Fuquay-Varina, NC 27526

**SUPPLIERS** Tyco Electronics Telecom OSP  
 8000 Purfoy Road  
 Fuquay-Varina, NC 27526

**EMERGENCY TELEPHONE NUMBERS:** US: CHEMTREC 1-800-424-9300  
 CN: CHEMTREC 1-800-424-9300  
 EU and Outside North America: 1-703-527-3887 (Collect calls accepted)

**NON-EMERGENCY HEALTH/SAFETY INFORMATION:** North America: 1- 888-557-8901

**CHEMICAL FAMILY:** Synthetic lubricant based on ethoxylated linear fatty alcohol and polyethylene glycol.

**PRODUCT USE:** Industrial lubricant.

This product contains a Hazardous Substance, Preparation that is regulated under US-OSHA; CAN-WHMIS; IOSH; ISO; UK-CHIP; or EU Directives (67/548/EEC-Dangerous Substance Labelling, 98/24/EC-Chemical Agents at Work, 99/45/EC-Preparation Labeling, 2001/58/EC-MSDS Content, and 1907/2006/EC-REACH), and an MSDS/SDS is required for this product considering that when used as recommended or intended, or under ordinary conditions, it may present a health and safety exposure or other hazard.

Additional Information

See Section 10 for conditions to avoid.

**SECTION 2: HAZARDS IDENTIFICATION**
**GHS Classification: Category 3 Mild Skin Irritant**

Health	Environmental	Physical
Acute Toxicity – NL Eye Corrosion - NL Skin Corrosion – NL Skin Sensitization – NL Mutagenicity – NL Carcinogenicity – NL Reproductive/Developmental – NL Target Organ Toxicity (Repeated) – NL	Aquatic Toxicity – NL	NFPA – NL CN - NL EU - NL

NL: Not listed

**GHS Label: May Irritate Skin. Harmful if Swallowed.**
**As required for Finished Goods according to End-Use Products Regulations**
**Symbols: None required**

<u>Hazard Statements</u>	<u>Precautionary Statements</u>
Can cause eye irritation and mild skin irritation. Possible Discomfort of Mucous Membranes.	Avoid Contact with Mucous Membranes, Eyes, or Oral Cavity. Do Not Inhale Vapours.

**EMERGENCY OVERVIEW:** This product may cause eye irritation. Prolonged or repeated contact may dry skin and cause irritation. Avoid contact with eyes or skin. In case of eye contact, immediately flush

affected eye(s) with plenty of water. If irritation develops and persists, seek immediate medical attention. In case of skin contact, immediately flush skin with plenty of water and remove any contaminated clothing. If skin irritation develops or persists, seek medical attention. Wash clothing before reuse. If swallowed and symptoms develop, seek immediate medical attention. If inhaled, and respiratory symptoms develop, move victim to fresh air and seek medical attention.

**POTENTIAL HEALTH EFFECTS:** The information presented below corresponds to the individual components of this product. Toxicity studies have not been performed on the mixture as a whole.

**EYES:** This product may cause eye irritation. Direct contact with the liquid may cause stinging, tearing and redness. Persons with pre-existing eye disorders may be more susceptible to the effects of this product.

**SKIN:** This product is not known to be a skin irritant. No harmful effects are expected from skin absorption of this material.

**INGESTION:** This product is expected to have a low degree of toxicity by ingestion (swallowing). However, swallowing excessive quantities may cause irritation and discomfort of the digestive tract, nausea, vomiting, abdominal cramps, anal irritation, diarrhoea and kidney damage.

**INHALATION:** Because of the low volatility of this product, exposure to vapours is unlikely.

**ACUTE HEALTH HAZARDS:**

Repeated or prolonged contact may cause mild skin irritation.

**CHRONIC HEALTH HAZARDS:**

Prolonged or repeated contact may dry and defat the skin causing irritation and dermatitis. Prolonged exposure to vapours is unlikely because of the low volatility of this product.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

None known.

Additional Information

This product's ingredients, present at equal to or greater than 0.1% of the product, are not listed by OSHA, NTP or IARC as suspect carcinogens.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<b><u>INGREDIENTS (Chemical/Common Names):</u></b>	<b><u>CAS No.:</u></b>	<b><u>% by Wt:</u></b>	<b><u>EC No.:</u></b>
Ethoxylated Linear Fatty Alcohol	68439-45-2	10	NE
Polyethylene glycol	25322-68-3	15	NE
Non-Hazardous Ingredients	NA	75	NA

NA – Not applicable/NE – Not Established/ND – Not determined

Additional Information

None.

**SECTION 4: FIRST AID MEASURES**

**EYE CONTACT:** In case of contact, immediately flush affected eye(s) with plenty of water. If irritation develops and persists, seek immediate medical attention.

**SKIN CONTACT:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. If skin irritation develops or persists, seek immediate medical attention. Wash clothing and shoes before reuse.

**INGESTION:** Not a normal route of exposure. However, if swallowed and symptoms develop, seek immediate medical attention.

**INHALATION:** Respiratory symptoms are unlikely due to the low volatility of the product. If respiratory symptoms develop, move victim to fresh air and seek immediate medical attention.

Additional Information

None.

**SECTION 5: FIRE-FIGHTING MEASURES****SUITABLE EXTINGUISHING MEDIA:**

Carbon dioxide, water fog or spray, dry chemical, foam.

**SPECIAL FIRE FIGHTING PROCEDURES & PROTECTIVE EQUIPMENT:**

Fire-fighters should wear self-contained breathing apparatus with a full face piece operated in the positive pressure demand mode when fighting fires. Use water spray to keep fire-exposed containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

None Known.

**SPECIFIC HAZARDS IN CASE OF FIRE:**

None Known.

Additional Information

Sparks may cause ignition of the product.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****PERSONAL PRECAUTIONS:**

Wear appropriate personal protection when responding, as specified under Section 8, below. Contain the spill with inert absorbent. Take measures to stop spillage at the source. Transfer contaminated absorbent into a clean, leak-proof container and handle as hazardous waste. Report spills to the appropriate provincial and local authorities.

**ENVIRONMENTAL PRECATIONS:**

Prevent spilled material from entering sewers and waterways.

**SPILL CONTAINMENT & CLEANUP METHODS/MATERIALS:**

Transfer contaminated wipes/absorbent/waste into approved waste containers. Keep out of sewers, storm drains, surface waters, and soil.

Additional Information

None.

**SECTION 7: HANDLING AND STORAGE****PRECAUTIONS FOR SAFE HANDLING AND STORAGE:**

**Handling:** Avoid contact with eyes and skin. Wash hands thoroughly after use. Remove contaminated clothing and shoes. Washing clothing before reuse. Do not consume food, beverages or tobacco in the immediate work area.

**Storage:** Store in a cool, dry, well-ventilated area. Keep away from strong oxidizers and protect from frost. DO NOT store in direct sunlight. Store away from active metals, open flames and combustibles. This product is stable under normal conditions. Store according to federal and provincial statutes and regulations and local by-laws.

**OTHER PRECAUTIONS (e.g.; Incompatibilities):**

Do not heat, weld, or perform other hot work near empty containers.

Additional Information

None.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****ENGINEERING CONTROLS/SYSTEM DESIGN INFORMATION:**

None required under normal use conditions.

**VENTILATION:**

General dilution ventilation is acceptable.

**RESPIRATORY PROTECTION:**

Not required due to the low volatility of the product. In accordance with good industrial hygiene practice, ensure adequate ventilation during use.

**EYE PROTECTION:**

Use safety glasses with side shield or goggles to prevent contact with eyes.

**SKIN PROTECTION:**

Avoid prolonged or repeated contact with skin. Use of chemical resistant gloves is recommended to prevent skin contact.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**

None required under normal use conditions.

**EXPOSURE GUIDELINES & LIMITS:**

OSHA	Permissible Exposure Limit (PEL/TWA)	NE
ACGIH	Threshold Limit Value (TLV) Short-Term Exposure Limit	NE
Quebec	Permissible Exposure Value (PEV) Short Term Exposure Limit	NE
Ontario	Occupational Exposure Level (OEL) Short Term Exposure Value	NE
Germany	Maximale Arbeitsplatzkonzentrationen (MAK) Short-Term Limit (30-minutes)	NE
United Kingdom	Occupational Exposure Standard (OES) Short-term Exposure Standard	NE

TWA – 8-Hour Time Weighted Average/ NE – Not Established

Additional Information

There are no reported exposure limits for the product or its ingredients.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE:</b>	Clear liquid
<b>ODOR:</b>	Mild odour
<b>ODOR THRESHOLD:</b>	Not determined
<b>PHYSICAL STATE:</b>	Liquid
<b>pH:</b>	7.7 +/- 0.2
<b>BOILING POINT:</b>	104°C
<b>MELTING POINT:</b>	Not applicable
<b>FREEZING POINT:</b>	Not applicable
<b>VAPOR PRESSURE (mm Hg):</b>	Not determined
<b>VAPOR DENSITY (AIR = 1):</b>	Not determined
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1):</b>	1.035 @ 20°C
<b>EVAPORATION RATE (Butyl acetate=1):</b>	Not determined
<b>SOLUBILITY IN WATER:</b>	Miscible
<b>FLASH POINT:</b>	Not determined
<b>AUTO-IGNITION TEMPERATURE:</b>	Not determined
<b>LOWER EXPLOSIVE LIMIT (LEL):</b>	Not determined
<b>UPPER EXPLOSIVE LIMIT (UEL):</b>	Not determined
<b>PARTITION COEFFICIENT:</b>	Not available
<b>VISCOSITY (centipoise @ 25° C):</b>	NA
<b>DECOMPOSITION TEMPERATURE:</b>	NA

**FLAMMABILITY/HMIS HAZARD CLASSIFICATIONS (US/CN/EU):**

HEALTH: 1      FLAMMABILITY: 0      REACTIVITY: 0

Additional Information

None.

**SECTION 10: STABILITY AND REACTIVITY**

<b>STABILITY:</b>	This chemical is stable under normal conditions at ambient temperature.
<b>INCOMPATIBILITY (MATERIAL TO AVOID):</b>	Avoid contact with strong oxidizers.
<b>HAZARDOUS DECOMPOSITION OR BY-</b>	Thermal degradation and combustion by-products may include, but are not limited to, carbon monoxide and carbon dioxide. In common with

**PRODUCTS:** most other organic materials, thermal degradation products are likely to be toxic and should not be inhaled.

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Protect from freezing temperatures.

Additional Information

None.

**SECTION 11: TOXICOLOGICAL INFORMATION****ACUTE TOXICITY (Test Results Basis and Comments):**Ethoxylated linear fatty alcohol: LD<sub>50</sub> (rat, oral): >200 mg/kgPolyethylene glycol: LD<sub>50</sub> (rat, oral): 38,000 – 50,000 mg/kg; LD<sub>50</sub> (mouse, oral): 31,000 – 50,000 mg/kg; LD<sub>50</sub> (guinea pig, oral): 17,000 – 50,000 mg/kg; LD<sub>50</sub> (rabbit, oral): 14,000 – 50,000 mg/kg; LD<sub>50</sub> (mouse, intraperitoneal): 3,100 - 12,900 mg/kg**SUBCHRONIC/CHRONIC TOXICITY (Test Results and Comments):**

None of the ingredients to which users may be exposed and which are present at equal to or greater than 0.1% of the product is listed by OSHA, NTP, or IARC as suspect carcinogens.

Additional Information

Skin absorption and inhalation of vapours are the most important routes of entry. However, this product is expected to have a low degree of toxicity by these routes. Ingestion is unlikely to occur during normal use.

**SECTION 12: ECOLOGICAL INFORMATION****PERSISTENCE & DEGRADABILITY:**

No data available on biodegradation.

**BIO-ACCUMULATIVE POTENTIAL (Including Mobility):**

No data available on bioaccumulation. Not expected to bioaccumulate due to high solubility in water.

**AQUATIC TOXICITY (Test Results & Comments):**Ethoxylated linear fatty alcohol: 96 hour LC<sub>50</sub>: (*Daphnia magna*): 9 ppmAdditional Information

- No known effects on stratospheric ozone depletion.
- Volatile organic compounds: NA
- Water Endangering Class (WGC): NA

**SECTION 13: DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHOD:** Use appropriate methods based on federal and provincial statutes and regulations and local by-laws. Contact local environmental agency for specific rules and instructions.

**HAZARDOUS WASTE CLASS/CODE:** This material is not classified as a hazardous waste.

US - Not applicable to material as manufactured for distribution into commerce.

CN – Not applicable to material as manufactured for distribution into commerce.

EWC – Not applicable to material as manufactured for distribution into commerce.

Additional Information

Not Included – Dispose/Recycle as allowed by local jurisdiction for the end-of-life characteristics as-disposed.

**SECTION 14: TRANSPORT INFORMATION****GROUND – US-DOT/CAN-TDG/EU-ADR/APEC-ADR:**

Proper Shipping Name	Finished Product Not Regulated as Dangerous Goods		
Hazard Class	NA	ID Number	NA
Packing Group	NA	Labels	NA

**AIRCRAFT – ICAO-IATA:**

Proper Shipping Name	Finished Product Not Regulated as Dangerous Goods		
Hazard Class	NA	ID Number	
Packing Group	NA	Labels	NA

**VESSEL – IMO-IMDG:**

Proper Shipping Name	Finished Product Not Regulated as Dangerous Goods		
Hazard Class	NA	ID Number	NA
Packing Group	NA	Labels	NA

**Additional Information**

- This material does not have a Transport Canada Product Identification Number (PIN).
- Transport requires proper packaging and paperwork, including the Nature and Quantity of goods, per applicable origin/destination/customs points as-shipped. Statement of Jurisdictional/Modal Special Provision(s) required.
- Not restricted for any mode of international transport as finished goods.
- Not a Marine Pollutant as-shipped per IMO/IMDG.

<b>SECTION 15: REGULATORY INFORMATION</b>
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<b>INVENTORY STATUS:</b>
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All components are listed on the TSCA; EINECS/ELINCS; and DSL, unless noted otherwise below.
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**U.S. FEDERAL REGULATIONS:**

**TSCA Section 8b – Inventory Status:** All chemicals comprising this product are either exempt or listed on the TSCA Inventory.

**TSCA Section 12b – Export Notification:** If the product contains chemicals subject to TSCA Section 12b export notification they are listed below:

<u>Chemical</u>	<u>CAS #</u>
None	NA

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT)**

Chemicals present in the product which could require reporting under the statute:

<u>Chemical</u>	<u>CAS #</u>
None	NA

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

If the product contains chemicals subject to the reporting requirements of Section 313 of SARA Title III, they are listed below.

<u>Chemical</u>	<u>CAS #</u>	<u>% wt</u>
None	NA	NA

**CERCLA SECTION 311/312 HAZARD CATEGORIES:** Note that this product is exempt from these regulations.

Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No
Immediate Hazard	No
Delayed Hazard	No

**STATE REGULATIONS (US):**
**California Proposition 65**

The following chemicals identified to exist in the product as distributed into commerce are known to the State of California to cause cancer, birth defects, or other reproductive harm:

<u>Chemical</u>	<u>CAS #</u>	<u>% Wt</u>
None	NA	NA

<b>California Consumer Product Volatile Organic Compound Emissions</b>
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This product may be regulated as a Consumer Product for purposes of CARB/OTC VOC Regulations, as-sold for the intended purpose and into the industrial/Commercial supply chain (See Section 12 for VOC information).
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**INTERNATIONAL REGULATIONS (Non-US):****Canadian Domestic Substance List (DSL)**

All ingredients remaining in the product as distributed into commerce are included on the Domestic Substances List.

**WHMIS Classifications**

Not applicable, based on low degree of toxicity and low flammability of product as sold. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**NPRI and Ontario Regulation 127/01**

This product contains the following chemicals subject to the reporting requirements of Canada NPRI and/or Ont. Reg. 127/01:

<u>Chemical</u>	<u>CAS #</u>	<u>% Wt</u>
None	NA	NA

**European Inventory of Existing Commercial Chemical Substances (EINECS)**

All ingredients remaining in the product as distributed into commerce are exempt from, or included on, the European Inventory of Existing Commercial Chemical Substances.

**European Communities (EC) Hazard Classification according to directives 67/548/EEC and 1999/45/EC.**

<u>R-Phrases</u>	<u>S-Phrases</u>
NA	NA

**Additional Information**

This product may be regulated under additional regulations and laws not identified above, such as for uses other than described or as-designed/as-intended by the manufacturer, or for distribution into specific domestic destinations.

**SECTION 16: OTHER INFORMATION****OTHER INFORMATION:**

Distribution into Quebec to follow Canadian Controlled Product Regulations (CPR) 24(1) and 24(2).

Distribution into the EU to follow applicable Directives to the Use, Import/Export of the product as-sold.

**SOURCES OF INFORMATION:**

International Agency for Research on Cancer (1987), *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Overall Evaluations of Carcinogenicity: An updating of IARC Monographs Volumes 1-42, Supplement 7, Lyon, France.*

Ontario Ministry of Labour Regulation 654/86. Regulations Respecting Exposure to Chemical or Biological Agents.

RTECS – Registry of Toxic Effects of Chemical Substances, National Institute for Occupational Safety and Health.

**MSDS/SDS PREPARATION INFORMATION:**

DATE OF ISSUE: **25 March 2008**

SUPERCEDES: **30 October 1998**

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**END**