# **Copeland®**

# marketing bulletin



**NO**: PP33-02 **DATE**: 10/3/02

TO: REFRIGERATION OEM SALES FORCE FROM: COPELAND REFRIGERATION DIVISION

SUBJECT: COPELAND POLYOL ESTER OIL (POE) – ULTRA 32 CC
SUMMARY: New Oil Viscosity For Shelby Built Refrigeration Scroll Models

**EFFECTIVE DATE:** First production delivery is scheduled for October 2002

**ACTION REQUIRED:** For Information Only – Customers to update records as needed

Copeland is announcing a minor change in the viscosity of the Polyol Ester (POE) oil used in all of its refrigeration scroll compressors that contain POE oil. Copeland will begin transitioning in early October from the use of Ultra 22 CC to Ultra 32 CC oil. Although these two oils are almost identical, the increase to 32 centistokes viscosity should provide better lubrication characteristics in applications where refrigerant dilution may occur. It is expected that all compressors manufactured with a serial number 02J or later will contain the new oil.

Although the viscosity of the oil has changed, the new Ultra 32 CC is completely compatible and mixable with all Copeland approved POE oils. Customers should already have a Material Safety Data Sheet (MSDS) for this oil since we were dual approved on this oil. A copy of the MSDS for the new oil has been included in this memo for your convenience.

This notice is being sent to Copeland sales managers and will be communicated to customers at their discretion. It is expected that this change will have no adverse effect on any current scroll application. Customers can contact their Application Engineer if they require further information.

Enclosure (1)





# **Material Safety Data Bulletin**

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**APPROVAL DATE: 7/5/02** 

PRODUCT NAME: Copeland Ultra 32CC

ICI Americas Inc

Uniqema Corporate Center
1000 Uniqema Boulevard
New Castle, Delaware 19720-2790
ICI Operator (24 hr.): (302) 574-5000
Medical Emergency (24 hr.): (888) 456-6218
Chemical Emergency (24 hr.) Involving Transportation
Spills, Leaks, Fires, Accidents: (800) 424-9300

General: Refrigeration Lubricant

Alternate Names:

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

 INGREDIENTS
 New Jersey TSR
 % (w/w)
 OSHA PEL

 Polyol Ester
 08306620-5803P
 >99
 Not listed

 Additives
 <1</td>
 Not listed

Ingredients not precisely identified are proprietary or nonhazardous.

#### 3. HAZARDS IDENTIFICATION

**Emergency Overview:** 

Appearance: Pale yellow, clear liquid

Physical: None Health: None

Hazard summary as defined by OSHA Hazard Comm. Std., 29 CFR 1910.1200.

**Potential Health Effects:** 

General: This health assessment is based on a consideration of the composition of this

product.

Repeated or prolonged skin contact may result in irritation. High concentrations of aero-

sols or mists may be slightly irritating to the upper respiratory tract.

Read the entire MSDS for a thorough evaluation of the hazards.

# 4. FIRST AID MEASURES

**Skin Contact:** Remove contaminated clothing. Wash material off of the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footware before reuse.

**Eye Contact:** Irrigate with eyewash solution or clean water, holding eyelids apart, for at least 10 minutes. if redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.

**Inhalation:** Remove patient from exposure. If a cough or other respiratory symptoms develop, consult medical personnel.

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water and give 1 or 2 glasses of water to drink. If gastrointestinal symptoms develop, consult medical personnel.

**Note to Physician:** This material is considered to be only slightly toxic. The potential complications associated with removing material from the GI tract, the amount ingested, and the time since ingestion should be taken into account when developing a treatment plan.

# **5. FIRE-FIGHTING MEASURES**

**Fire and Explosion Hazards:** Low fire hazard. Unlikely to ignite except in high heat flux conditions. Thermal decomposition will evolve irritant vapors.

Flammable limits (STP): No data

**Extinguishing media:** Carbon dioxide, dry chemical or appropriate foam. If water is used, use with care to avoid possible violent production of steam.

Fire fighting equipment: Use self-contained breathing apparatus with full facepiece and protective clothing.

Flashpoint (Deg C): 254 (open cup)
Autoignition temperature (Deg C): 390

Explosive Power: None

Combustion Products: Carbon dioxide, Carbon monoxide NFPA Hazard ID: Health: 1, Flammability: 1, Reactivity: 0,

Special Hazard: None

### 6. ACCIDENTAL RELEASE MEASURES

Wear skin protection during clean-up. Contain and absorb large spillages onto an inert, non-flammable absorbent carrier (such as earth or sand). Do not allow to enter drains, sewers, or waterways. Shovel into a chemical waste container for disposal or recovery.

### 7. HANDLING AND STORAGE

**Handling:** Avoid prolonged or recurring skin contact. Avoid inhalation of high concentrations of mists or aerosols.

**Storage Requirements**: Avoid ingress of moisture by keeping containers properly sealed when not in use. Product application requires that the product remain dry and free of excessive moisture pick-up. Keep away from strong oxidizing agents.

Suitable Containers: Mild Steel.

Storage Temperature: Ideal storage temperature is 60 to 100 deg F.

Storage Life: Two years, minimum.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure guidelines:** No OSHA PELS or ACGIH TLVs have been assigned. Minimize exposure in accordance with good industrial hygiene practice.

**Engineering controls:** Provide eyewash station and safety shower in work area. Use ventilation adequate to maintain safe levels.

**Respiratory protection:** Not normally needed, if controls are adequate. If needed, use MSHA-NIOSH approved respirator for organic vapors.

**Protective clothing:** Gloves determined to be impervious under conditions of use. Depending on conditions of use, additional protection may be required, such as apron, arm covers, or full body suit. Wash contaminated clothing before rewearing.

Eye protection: Chemical tight goggles.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pale yellow, clear liquid

Odor: Mild

Flash point (deg C): 254 (open cup)
Boiling point (deg C): >300

Vapor pressure (mm Hg at 20 deg C): 6.5 Specific gravity (20/20 deg C): 0.972 Solubility in water: Insoluble Solubility (other): No data

Pour point (deg C): -45

Kinematic viscosity (cSt at 40 deg C): 30.8

(cSt at 100 deg C): 5.6

### 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents.

Hazardous decomposition products: Highly unlikely under intended handling and use.

See Section 5.

Combustion products: Carbon dioxide, Carbon monoxide.

Hazardous polymerization: Will not occur.

#### 11.TOXICOLOGICAL DATA

#### Possible human health effects:

**Inhalation:** High concentrations of mist may be slightly irritating to the upper respiratory tract. Thermal decomposition will evolve irritant vapors.

**Skin contact:** Repeated or prolonged skin contact may result in irritation. Not a skin irritant per OSHA Hazard Communication Standard, 29 CFR 1910.1200. It is unlikely to be a skin sensitizer following contact with human skin.

Eye contact: Unlikely to cause eye irritation in man.

Ingestion: Low oral toxicity.

Carcinogenicity: The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP

Mutagenicity: There is no substantial evidence of mutagenic potential.

Reproductive effects: No information is available and no adverse effects are anticipated.

**Teratogenicity and Fetotoxicity:** No information is available and no adverse effects are anticipated.

12. ECOLOGICAL INFORMATION

**Persistency and degradation:** The product is substantially biodegradable in water. Effects on effluent treatment: Not determined.

#### 13. DISPOSAL CONSIDERATIONS

**Disposal method:** Discarded product is not a hazardous waste under RCRA, 40 CFR 261.

**Container disposal:** Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container before disposal.

# 14. TRANSPORT INFORMATION

DOT, IMO, IATA/ICAO class: Not regulated.

# 15. REGULATORY INFORMATION

OSHA classification:

Physical: Not regulated. Health: Not regulated.

**TSCA (Toxic Substances Control Act) Regulations:** All ingredients are on the TSCA Chemical Substances Inventory.

Chemical Substances inventory.

CERCLA and SARA Regulations (40 CFR 355, 370, and 372): This product does not contain any chemicals subject to the reporting requirements of SARA Section 313.

**Controlled Products Regulations (WHMIS) Classification:** Not regulated. IARC Classification: None of the components of this product are listed on IARC.

## 16. OTHER INFORMATION

HMIS Ratings: Health Hazards: 1 Flammability Hazards: 1 Reactivity Hazards: 0

Personal Protection: See MSDS Section 8

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Emerson Electric Co.

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