



# **Precise<sup>™</sup> EP** Premium Quality Versatile Gear Oils

### About Precise<sup>™</sup> EP

**Precise™ EP** are a series of versatile, premium quality oils formulated to provide years of troublefree service, lubricating all types of enclosed industrial gearboxes. **Precise™ EP** cover all applications requiring extreme pressure properties over a wide range of temperatures due to their naturally high viscosity index and the addition of sulfur and phosphorous compounds.

### Applications

Precise<sup>™</sup> EP Oils are best suited for:

Specification
250 03, 250 04
<b>384, 161</b>
P-35, P-59, P-63, P-74, P-76, P-77, P-78
ET-19
51517
<b>100-02</b>
= GL-4
PAS 06-4 GSP
135, 136, 222, 224

### **Available Packaging**

These products are available in pails (19L/5 US Gal), drums (208L/55 US Gal), and bulk (1250L/330 US Gal) containers.

Discover the exact advantage www.exactspecialty.com

# Precise<sup>™</sup> EP Oils Premium Quality Versatile Gear Oils

## **Performance Benefits**

**Precise™ EP** Oils provide the following benefits:

- Extreme pressure properties
- No additive separation
- Low pour point
- Anti-foam properties
- Oxidation stability
- Excellent adhesion to gear surfaces over periods of long inactivity
- Non-corrosive in normal service allowing chemical stability

#### **Technically Speaking**

ISO Viscosity Grade	32	68	100	150	
NSF Registration Number	137098	137099	137100	137101	
Viscosity, cSt @ 40°C	32	68	100	150	
Viscosity, cSt @ 100°C	5.3	8.6	11.2	14.7	
Viscosity, SUS @ 100°F	150.5	315	463	695	
Viscosity, SUS @ 210°F	43.6	54.4	63.5	76.7	
Viscosity Index	98.3	97.5	97.1	96.8	
Flash Point, °C (COC)	> 205	> 225	> 235	> 240	
Flash Point, °F (COC)	> 400	> 440	> 455	> 460	
Pour Point, °C/°F	-30/-22	-29/-21	-24/-12	-20/-5	
Rust, Dist. Water	Pass	Pass	Pass	Pass	
Specific Gravity, g/mL	0.860	0.868	0.874	0.878	
Density, lbs./US Gal	7.16	7.22	7.27	7.30	
Copper Strip Corrosion	1A	1A	1A	1A	
ISO Viscosity Grade	220	320	460		
NSF Registration Number	137102	137103	137104		
Viscosity, cSt @ 40°C	220	320	460		
Viscosity, cSt @ 100°C	18.9	24.2	30.6		
Viscosity, SUS @ 100°F	1019	1482	2131		
Viscosity, SUS @ 210°F	93.8	116.6	145.2		
Viscosity Index	96.5	96.2	96		
Flash Point, °C (COC)	> 245	> 250	> 250		
Flash Point, °F (COC)	> 470	> 480	> 480		
Pour Point, °C/°F	-18/0	-18/0	-18/0		
Rust, Dist. Water	Pass	Pass	Pass		
Specific Gravity, g/mL	0.884	0.888	0.894		
Density, lbs./US Gal	7.35	7.39	7.44		
Copper Strip Corrosion	1A	1A	1A		
These are typical figures and	These are typical figures and do not constitute a specification.				

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### Handling and Safety Information

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet (MSDS), obtainable from www.exactspecialty.com





## **SECTION 1: Product Information and Company Identification**

Common Name	Precise™ EP
Product Code	E2033, E2034, E2035, E2040, E2045, E2050,
	E2055
Material Use	Premium Quality Versatile Gear Oils
Manufacturer	Commonwealth Oil Corporation
	2080 Ferriss Rd. N., Harrow ON.
	NOR 1G0
In Case of Emergency	CANUTEC (613) 996-6666, collect 24 hours

### **SECTION 2: Composition and Information on Ingredients**

ComponentCAS Registry #OSHA PELACGIH TVLConcentration, %This material is classified as not hazardous under OSHA regulations in the United States, the<br/>WHMIS in Canada and NOM-018-STPS-2000 in MexicoUnited States, the

See SECTION 8 for Exposure Limits and SECTION 11 for Toxicological Data

### **SECTION 3: Hazards Information**

Chemical Family	<ul> <li>Petroleum hydrocarbon</li> </ul>
Physical State	Liquid
Emergency Overview	<ul> <li>No specific hazard</li> </ul>
	<ul> <li>Use with care</li> </ul>
	<ul> <li>Follow good industrial hygiene practices</li> </ul>
Routes of Entry	<ul> <li>Dermal and eye contact, inhalation, ingestion</li> </ul>
Potential Acute Health Effects	None known
Medical Conditions Aggravated By Overexposure	None known
Overexposure Signs and Symptoms	Not available
See SECTION 11 for Toxicological Data	
SECTION 4: First Aid Measures	
Eye Contact	<ul> <li>Check for and remove any contact lenses. In case of contact, flush eyes with plenty of water for at least 20 minutes. Cold water may be used. Get medical attention should</li> </ul>
	irritation persist.
Skin Contact	<ul> <li>Remove any contaminated clothing. Wash with soap and water. Get medical attention should irritation persist.</li> </ul>
Inhalation	<ul> <li>If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.</li> </ul>
Ingestion	<ul> <li>Do not induce vomiting unless directed to do</li> </ul>
www.exactspecialty.com	:
1-800-265-3689; fax: 519-738-3335	

Precise <sup>™</sup> EP Oils – Material Safety Data	Sheet (MSDS)
Note to Physician	so by medical personnel. Never give anything by mouth to an unconscious patient. Should large amounts be swallowed, call a physician. Not available
Note to Physician	
SECTION 5: Fire Fighting Measures	
Flammability	<ul> <li>Low hazard - combustible or burns at temperatures above flash point</li> </ul>
Auto-Ignition Temperature	<ul> <li>Not established</li> </ul>
Flash Point (COC)	> 205°C (> 400°F) to > 250°C (> 480°F)
Flammable Limits	<ul> <li>Not established</li> </ul>
Hazardous Combustion Products	<ul> <li>Products are smoke, carbon monoxide, carbon</li> </ul>
Fire Hazard in Presence of Various Substances	<ul><li>dioxide, and trace oxides of sulfur</li><li>Flammable in presence of open flames, spark,</li></ul>
Explosion Hazard in Presence of Various	<ul> <li>static discharge and at or above flash point</li> <li>Risk in Presence of Mechanical Impact: Not</li> </ul>
Substances	available <ul> <li>Risk in Presence of Static Discharge: Not</li> </ul>
Fire Fighting Media and Instructions	available Small Fire: Use dry chemical powder
The righting media and instructions	<ul> <li>Large Fire: Use water spray, fog, or foam. Do</li> </ul>
Protective Clothing (Fire)	not use water jet. Fire fighters should wear positive pressure
rotective clothing (rife)	self-contained breathing apparatus (SCBA) and
	full turnout gear. Be sure to use MSHA/NIOSH approved respirator or equivalent
Special Remarks on Fire Hazards	<ul> <li>Do not use force stream as this could cause</li> </ul>
	the fire to spread
	<ul> <li>SCBA should be worn by fire fighters</li> </ul>
SECTION 6: Accidental Release Measures	
Small Spill and Leak	<ul> <li>Absorb with an inert material and put spilled material into appropriate waste disposal</li> </ul>
Large Spill and Leak	<ul> <li>Absorb with an inert material and put spilled</li> </ul>
	material into appropriate waste disposal
	<ul> <li>Do not allow any potentially contaminated</li> </ul>
	water, including rain water, runoff from fire
	fighting or spills, to enter ay waterway, sewer
See SECTION 8 for Personal Protective Education	or drain quipment and SECTION 13 for Waste Disposal
SECTION 7: Handling and Storage	
Handling	Proper grounding procedures should be used
-	as static charge may accumulate
	<ul> <li>Avoid breathing vapors or spray mists</li> </ul>
	<ul> <li>Avoid contact with eyes, skin and clothing</li> </ul>
	<ul> <li>Always wash your hands after handling</li> </ul>
	<ul> <li>Do not cut, weld, heat or pressurize</li> </ul>
	containers

Keep containers tightly closed

Storage www.exactspecialty.com 1-800-265-3689; fax: 519-738-3335

- Store in dry, cool, and ventilated areas
- Do not cut, weld, heat or pressurize empty containers
- Do not store near open flames or sources of ignition

## **SECTION 8: Exposure Controls and Personal Protection**

Personal Protection	
Eyes	<ul> <li>Safety glasses or goggles are advisable</li> </ul>
Body	<ul> <li>Lab coat or suitable protective clothing are advisable</li> </ul>
Respiratory	<ul> <li>Not required under normal and intended usage conditions</li> </ul>
Hands	<ul> <li>Chemical resistant or oil impervious gloves are advisable</li> </ul>
Feet	<ul> <li>Shoes (as required by work place)</li> </ul>
Protection for Large Spills	<ul> <li>Splash goggles, full suit, vapor respirator, boots, chemical resistant gloves</li> </ul>
	<ul> <li>Self contained breathing apparatus should be used to avoid inhalation of product</li> </ul>

#### **Engineering Controls**

- Good ventilation should be sufficient to control airborne levels
- Local exhaust is recommended to control emissions at the source
- Mechanical ventilation should be used for confined areas
- Eyewash stations and safety showers should be proximal to the workstation

### **Exposure Limits**

ACGIH TLV (US and Canada)

#### **Oil Mist - Severely Refined**

- TLV-TWA: 5mg/m<sup>3</sup>
- Form: Mist

Consult your local authorities for your acceptable exposure limits

# **SECTION 9: Physical and Chemical Properties**

Physical State Appearance and Colour Odour pH Flash Point (COC) Boiling/Condensation Point Pour Point Freezing Point Specific Gravity Density Vapor Pressure Vapor Density % Volatility, by volume	<ul> <li>Liquid</li> <li>Clear, golden amber to dark brown</li> <li>Petroleum odour</li> <li>N/A</li> <li>&gt; 205°C (&gt; 400°F) to &gt; 250°C (&gt; 480°F)</li> <li>Not established</li> <li>-18/0 (°C/°F) to -30/-22 (°C/°F)</li> <li>Not established</li> <li>0.860 - 0.894g/mL (Water = 1g/mL)</li> <li>7.16 - 7.44 lbs./US Gal</li> <li>Not established</li> <li>Not established</li> <li>Not established</li> <li>Not established</li> <li>Not established</li> <li>Not established</li> </ul>
Evaporation Rate VOC Viscosity (cSt @ 40°C) Solubility in Water	<ul> <li>N/A</li> <li>N/A</li> <li>32, 68, 100, 150, 220, 320, 460</li> <li>Not soluble</li> </ul>
SECTION 10: Stability and Reactivity	
Stability and Reactivity Incompatibility with Various Substances Hazardous Decomposition Products Hazardous Polymerization	<ul> <li>Stable</li> <li>Reactive with strong oxidizing agents</li> <li>Fumes, smoke, carbon monoxide and oxides of sulfur in case of incomplete combustion</li> <li>Will not occur</li> </ul>
SECTION 11: Toxicological Information Chronic Effects on Humans	
Eyes Skin Ingestion Inhalation	<ul> <li>Slightly irritating, but will not injure eye tissue</li> <li>Low toxicity. Prolonged exposure may irritate</li> <li>Low toxicity</li> <li>Negligible under normal conditions</li> <li>Elevated temperatures, or mechanical action may cause vapors, mists or fumes which may be irritating to the eyes, nose, throat and lungs</li> </ul>
Other Effects	
Acute Toxic Data Other Toxic Effects on Humans Special Remarks on Toxicity to Animals Special Remarks on Other Toxic Effects on Humans	<ul> <li>Avoid breathing mist and fumes</li> <li>Proper ventilation should be utilized</li> <li>Low</li> <li>Low</li> <li>None reported</li> </ul>

## SECTION 12: Ecological Information

BOD and COD	<ul> <li>Not established</li> </ul>
Biodegradability/OECD	<ul> <li>Not established</li> </ul>
Mobility	Not established
Products of Degradation	Not established
Products of Biodegradation	Not established
Special Remarks on the Products of	Not established
Biodegradation	

## **SECTION 13: Disposal Considerations**

 Wastes should be disposed of in accordance to local, federal and state environmental control regulations

### **SECTION 14: Transport Information**

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
United States (DOT)	Not regulated	-	-	-	-	-
Canada (TDG)	Not regulated	-	-	-	-	-
Mexico (NOM-004- SCT2-1994)	Not regulated	-	-	-	-	-
IMDG Code	Not regulated	-	-	-	-	-
IATADGR Class	Not regulated	-	-	-	-	-

NAERG (North American Emergency Response Guide): N/A

### **SECTION 15: Regulatory Information**

### **United States: Federal Regulations**

- TSCA 8(b) Inventory: All products are listed or exempt
- SARA 302/304/311/312 Extremely Hazardous Substances: No products found
- SARA 302/304 Emergency Planning and Notification: No products found
- SARA 302/304/311/312 Hazardous Chemicals: No products found
- SARA 311/312 MSDS Distribution Chemical Inventory Hazard Identification: No products found
- Clean Water Act (CWA) 307: No products found
- Clean Water Act (CWA) 311: No products found
- Clean Air Act (CAA) 112 Accidental Release Prevention: No products found
- Clean Air Act (CAA) 112 Regulated Flammable Substances: No products found
- Clean Air Act (CAA) 112 Regulated Toxic Substances: No products found

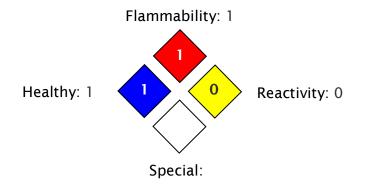
### **United States: State Regulations**

California Prop. 65: No products found

### Canada: WHMIS

- Not controlled under WHMIS
- CEPA DSL: All products are listed or exempt
- "This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations."

## **Mexico: Classification**



## **SECTION 16: Other Information**

### Label Requirements

- "Use with care"
- "Use as directed"

Hazardous Material Information System (USA):

Health	1
Fire Hazard	1
Reactivity	0
Personal Protection	В

National Fire Protection Association (USA):

Date of Issue	<ul> <li>February 15, 2010</li> </ul>
Date of Previous Issue	<ul> <li>November 7, 2007</li> </ul>

### Note to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Authored By: Exact<sup>™</sup> Specialty Products Technical Services Department, (519) 738-3503