



Nonfood Compounds
Program Listed H1

Exact™ EP

Food Grade Gear and Bearing Lubricants

About Exact™ EP

Exact™ EP are premium quality lubricants using severely hydro-treated food grade oils and the highest quality additives. Exact™ EP are engineered under these strict constraints to offer prolonged service life under severe operating conditions. Exact™ EP meet FDA Regulations 21 CFR 178.3570 and international food standards. Exact™ EP are NSF H1 registered, and Canadian Food Inspection Agency approved.

Applications

Exact™ EP are best suited for:

- Food processing areas or applications
- Normal to heavy shock loading conditions
- Compatible with elastomers and seal materials
- Enclosed gear sets
- Reciprocating air compressors

Available Packaging

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

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the  exact advantage

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Exact™ EP

Food Grade Gear and Bearing Lubricants

Performance Benefits

Exact™ EP offers the following benefits:

- Resistance to oxidative breakdown to help maintain sludge-free systems that deliver long fluid life and decreased downtime
- Resistance to acids from foods as well as alkali components
- Good water separation characteristics
- Protects against rust and corrosion

Technically Speaking

| ISO Viscosity Grade | 68 | 100 | 150 | 220 | 320 | 460 |
|-------------------------|--------|--------|--------|--------|--------|---------|
| NSF Registration Number | 136891 | 136892 | 136893 | 136894 | 136895 | 136896 |
| Viscosity, cSt @ 40°C | 68 | 100 | 150 | 220 | 320 | 460 |
| Viscosity, cSt @ 100°C | 9 | 12 | 16 | 19 | 25 | 30 |
| Viscosity, SUS @ 100°F | 315 | 530 | 775 | 1100 | 1600 | 2250 |
| Viscosity, SUS @ 210°F | 59.6 | 65 | 85 | 95 | 117 | 140 |
| Viscosity Index | 110 | 100 | 95 | 95 | 100 | 93 |
| Flash Point, °C (COC) | 227 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Flash Point, °F (COC) | 441 | > 464 | > 464 | > 464 | > 464 | > 464 |
| Pour Point, °C/°F | -17/0 | -15/5 | -18/0 | -18/0 | -20/-4 | -30/-22 |
| Rust, Dist. Water | Pass | Pass | Pass | Pass | Pass | Pass |
| Specific Gravity, g/mL | 0.864 | 0.865 | 0.865 | 0.875 | 0.900 | 0.910 |
| Density, lbs./US Gal | 7.210 | 7.218 | 7.218 | 7.300 | 7.510 | 7.590 |

These are typical figures and do not constitute a specification.

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



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SECTION 1: Product Information and Company Identification

| | |
|----------------------|--|
| Common Name | Exact™ EP 68, 100, 150, 220, 320, 460 |
| Product Code | E2005, E2010, E2015, E2020, E2025, E2030 |
| Material Use | Food Grade Gear and Bearing Lubricants |
| 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

| Component | CAS Registry # | OSHA PEL | ACGIH TVL | Concentration, % |
|-----------|----------------|----------|-----------|------------------|
|-----------|----------------|----------|-----------|------------------|

This material is classified as not hazardous under OSHA regulations in the United States, the WHMIS in Canada and NOM-018-STPS-2000 in Mexico

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

SECTION 3: Hazards Information

| | |
|---|---|
| Chemical Family | <ul style="list-style-type: none"> Petroleum hydrocarbon |
| Physical State | <ul style="list-style-type: none"> Liquid |
| Emergency Overview | <ul style="list-style-type: none"> No specific hazard Use with care Follow good industrial hygiene practices |
| Routes of Entry | <ul style="list-style-type: none"> Dermal and eye contact, inhalation, ingestion |
| Potential Acute Health Effects | <ul style="list-style-type: none"> None known |
| Medical Conditions Aggravated By Overexposure | <ul style="list-style-type: none"> None known |
| Overexposure Signs and Symptoms | <ul style="list-style-type: none"> Not available |

- See SECTION 11 for Toxicological Data

SECTION 4: First Aid Measures

| | |
|--------------|--|
| Eye Contact | <ul style="list-style-type: none"> 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 irritation persist. |
| Skin Contact | <ul style="list-style-type: none"> Remove any contaminated clothing. Wash with soap and water. Get medical attention should irritation persist. |
| Inhalation | <ul style="list-style-type: none"> If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Ingestion | <ul style="list-style-type: none"> Do not induce vomiting unless directed to do |

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so by medical personnel. Never give anything by mouth to an unconscious patient. Should large amounts be swallowed, call a physician.

Note to Physician

- Not available

SECTION 5: Fire Fighting Measures

Flammability

Auto-Ignition Temperature

Flash Point (COC)

Flammable Limits

Hazardous Combustion Products

Fire Hazard in Presence of Various Substances

Explosion Hazard in Presence of Various Substances

Fire Fighting Media and Instructions

Protective Clothing (Fire)

Special Remarks on Fire Hazards

- Low hazard – combustible or burns at temperatures above flash point
- 354°C (670°F)
- > 200°C (> 392°F)
- Not established
- Products are smoke, carbon monoxide, carbon dioxide, and trace oxides of sulfur
- Flammable in presence of open flames, spark, static discharge and at or above flash point
- Risk in Presence of Mechanical Impact: Not available
- Risk in Presence of Static Discharge: Not available
- Small Fire: Use dry chemical powder
- Large Fire: Use water spray, fog, or foam. Do not use water jet.
- Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Be sure to use MSHA/NIOSH approved respirator or equivalent
- Do not use force stream as this could cause the fire to spread
- SCBA should be worn by fire fighters

SECTION 6: Accidental Release Measures

Small Spill and Leak

Large Spill and Leak

- Absorb with an inert material and put spilled material into appropriate waste disposal
- Absorb with an inert material and put spilled material into appropriate waste disposal
- Do not allow any potentially contaminated water, including rain water, runoff from fire fighting or spills, to enter any waterway, sewer or drain

- See SECTION 8 for Personal Protective Equipment and SECTION 13 for Waste Disposal

SECTION 7: Handling and Storage

Handling

Storage

- Proper grounding procedures should be used as static charge may accumulate
- Avoid breathing vapors or spray mists
- Avoid contact with eyes, skin and clothing
- Always wash your hands after handling
- Do not cut, weld, heat or pressurize containers
- Keep containers tightly closed
- Store in dry, cool, and ventilated areas

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

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/m³
- Form: Mist

Consult your local authorities for your acceptable exposure limits

SECTION 9: Physical and Chemical Properties

- | | |
|----------------------------|---|
| Physical State | ▪ Liquid |
| Appearance and Colour | ▪ Clear, colourless solution |
| Odour | ▪ Petroleum |
| pH | ▪ N/A |
| Flash Point (COC) | ▪ > 200°C (> 392°F) |
| Boiling/Condensation Point | ▪ Not available |
| Pour Point | ▪ -12°C (10°F) |
| Freezing Point | ▪ Not available |
| Specific Gravity | ▪ 0.84 – 0.88 g/mL (Water = 1g/mL) |
| Density | ▪ 7.08 lbs./US Gal |
| Vapor Pressure | ▪ < 1 mm Hg @ 20°C (68°F) |
| Vapor Density | ▪ > 1 (Air = 1) |
| % Volatility, by volume | ▪ Not available |
| Evaporation Rate | ▪ Negligible |
| VOC | ▪ N/A |
| Viscosity (cSt @ 40°C) | ▪ 68, 100, 150, 220, 320, 460 (typical) |
| Solubility in Water | ▪ Not soluble |
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SECTION 10: Stability and Reactivity

| | |
|---|---|
| Stability and Reactivity | ▪ Stable |
| Incompatibility with Various Substances | ▪ Reactive with strong oxidizing agents |
| Hazardous Decomposition Products | ▪ Fumes, smoke, carbon monoxide and oxides of sulfur in case of incomplete combustion |
| Hazardous Polymerization | ▪ Will not occur |

SECTION 11: Toxicological Information

Chronic Effects on Humans

| | |
|------------|--|
| Eyes | ▪ Slightly irritating, but will not injure eye tissue |
| Skin | ▪ Low toxicity. Prolonged exposure may irritate |
| Ingestion | ▪ Low toxicity |
| Inhalation | ▪ Negligible under normal conditions |
| | ▪ Elevated temperatures, or mechanical action may cause vapors, mists or fumes which may be irritating to the eyes, nose, throat and lungs |

Other Effects

| | |
|--|---|
| Acute Toxic Data | ▪ Avoid breathing mist and fumes |
| | ▪ Proper ventilation should be utilized |
| Other Toxic Effects on Humans | ▪ Low |
| Special Remarks on Toxicity to Animals | ▪ Low |
| Special Remarks on Other Toxic Effects on Humans | ▪ None reported |

SECTION 12: Ecological Information

| | |
|---|-------------------|
| BOD and COD | ▪ Not established |
| Biodegradability/OECD | ▪ Not established |
| Mobility | ▪ Not established |
| Products of Degradation | ▪ Not established |
| Products of Biodegradation | ▪ Not established |
| Special Remarks on the Products of Biodegradation | ▪ Not established |

SECTION 13: Disposal Considerations

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

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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

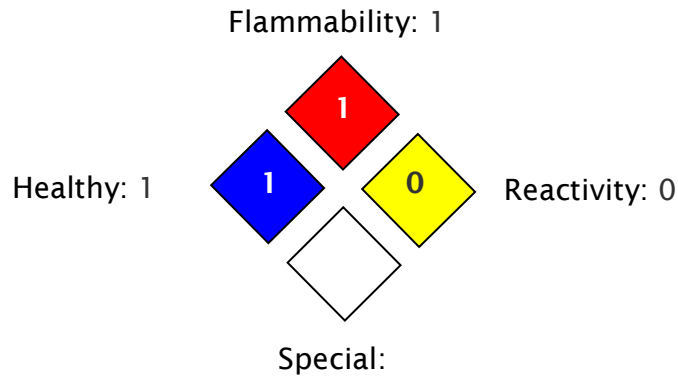
- **California Prop. 65:** No products found

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*."

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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 | B |

National Fire Protection Association (USA):

- Date of Issue
- February 15, 2010
- Date of Previous Issue
- November 7, 2007
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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.

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