# Exact™ SL Universal Oils

## Food Grade Multi-Purpose Synthetic Oils

### About Exact™ SL Universal Oils

**Exact™ SL Universal Oils** are premium quality synthetic lubricants engineered with the highest quality additives to offer prolonged service life under the most severe operating conditions. **Exact™ SL Universal Oils** conform to international food standards. All components are approved under FDA regulation 21 CFR 178.3570. **Exact™ SL Universal Oils** are **NSF H1** registered and authorized by the **Canadian Food Inspection Agency. Exact™ SL Universal Oils** are confirmed to be safe for incidental food contact. All viscosity grades are specifically formulated to operate in wet or dry food processing environments. **Exact™ SL Universal Oils** are compounded to assure excellent protection against wear, foam and rust.

### Applications

**Exact™ SL Universal Oils** are best suited for:

- Food processing and some pharmaceutical areas
- Hydraulic applications
- Bearings
- Gearboxes
- Airline lubrication
- Pumps
- General purpose lubrication
- Chains

### 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

www.exactspecialty.com

# Exact™ SL Universal Oils

## Food Grade Multi-Purpose Synthetic Oils

### Performance Benefits

**Exact™ SL Universal Oils** provide the following benefits:

- Exceptional resistance to rust and corrosion, even when operating in wet or humid environments
- Resist oxidative breakdown to provide sludge-free systems, longer fluid life, and decreased downtime
- Protects your equipment and metal parts with anti-wear technology for use in tough operating conditions
- Specialty additive package allows the fluid to adhere to surfaces, preventing fluid drips and spray loss as well as some anti-misting properties
- Fully synthetic base fluid provides superior lubrication under a broad range of applications

### Technically Speaking

| ISO Viscosity Grade | 7 | 15 | 22 | 32 | 46 | 68 | 100 |
|---|---|---|---|---|---|---|---|
| NSF Registration Number | 139159 | 139155 | 139156 | 139160 | 139161 | 139162 | 139163 |
| Viscosity, cSt @ 40°C | 7 | 15 | 22 | 32 | 46 | 68 | 100 |
| Viscosity, cSt @ 100°C | NA | 3.3 | 4.2 | 5.4 | 6.7 | 9 | 11.5 |
| Viscosity, SUS @ 100°F | NA | 78 | 110 | 158 | 220 | 340 | 480 |
| Viscosity, SUS @ 210°F | NA | 37 | 40 | 44 | 47 | 55 | 63 |
| Viscosity Index | NA | 80.1 | 87.8 | 102 | 97 | 106 | 102 |
| Flash Point, °C (COC) | 164 | 176 | 186 | 210 | > 240 | > 240 | > 240 |
| Flash Point, °F (COC) | 327.2 | 348.8 | 366.7 | 410 | > 464 | > 464 | > 464 |
| Pour Point, °C/°F | -35/-31 | -35/-31 | -35/-31 | -30/-22 | -30/-22 | -30/-22 | -30/-22 |
| Specific Gravity, g/ml | 0.82 | 0.83 | 0.83 | 0.84 | 0.84 | 0.84 | 0.84 |
| Density, lbs./US Gal | 6.84 | 6.93 | 6.93 | 7.01 | 7.01 | 7.01 | 7.01 |

| ISO Viscosity Grade | 150 | 220 | 320 | 460 | 680 | 1000 |
|---|---|---|---|---|---|---|
| NSF Registration Number | 139164 | 139166 | 139167 | 139168 | 139169 | 139170 |
| Viscosity, cSt @ 40°C | 150 | 220 | 320 | 460 | 680 | 1000 |
| Viscosity, cSt @ 100°C | 15 | 19 | 25 | 29 | 39 | 50 |
| Viscosity, SUS @ 100°F | 700 | 1050 | 1700 | 2200 | 3300 | 5000 |
| Viscosity, SUS @ 210°F | 75 | 94 | 120 | 138 | 180 | 235 |
| Viscosity Index | 99.7 | 96.8 | 90.6 | 89.5 | 94.8 | 95.2 |
| Flash Point, °C (COC) | > 240 | > 240 | > 240 | > 240 | > 240 | > 240 |
| Flash Point, °F (COC) | > 464 | > 464 | > 464 | > 464 | > 464 | > 464 |
| Pour Point, °C/°F | -30/-22 | -30/-22 | -30/-22 | -24/-11 | -24/-11 | -24/-11 |
| Specific Gravity, g/ml | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Density, lbs./US Gal | 7.01 | 7.01 | 7.01 | 7.01 | 7.01 | 7.01 |

*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 the **Material Safety Data Sheet** (MSDS), obtainable from **www.exactspecialty.com**

## SECTION 1: Product Information and Company Identification

| | |
|---|---|
| Common Name | Exact™ SL Universal Oils |
| Product Code | E5000, E5005, E5010, E5015, E5020, E5025, E5030, E5035, E5040, E5045, E5050, E5055, E5060 |
| Material Use | Food Grade Multi-Purpose Synthetic Oils |
| Manufacturer | Commonwealth Oil Corporation<br>2080 Ferriss Rd. N., Harrow ON.<br>N0R 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 | ▪ Petroleum Hydrocarbon |
| Physical State | ▪ Liquid |
| Emergency Overview | ▪ No specific hazard<br>▪ Use with care<br>▪ Follow good industrial hygiene practices |
| Routes of Entry | ▪ Dermal and eye contact, inhalation, ingestion |
| 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 | ▪ 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 | ▪ Remove any contaminated clothing. Wash with soap and water. Get medical attention should irritation persist. |
| Inhalation | ▪ If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |

| | |
|---|---|
| Ingestion | ▪ Do not induce vomiting unless directed to do 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 | ▪ Low hazard – combustible or burns at temperatures above flash point |
| Auto-Ignition Temperature | ▪ Not established |
| Flash Point (COC) | ▪ > 164ºC (> 327.2ºF) |
| Flammable Limits | ▪ Not established |
| Hazardous Combustion Products | ▪ Products are smoke, oxides of carbon, nitrogen, sulfur and phosphorus, as well as trace amounts of aldehydes & ketones. |
| Fire Hazard in Presence of Various Substances | ▪ Flammable in presence of open flames, spark, static discharge and at or above flash point |
| Explosion Hazard in Presence of Various Substances | ▪ Risk in Presence of Mechanical Impact: Not available<br>▪ Risk in Presence of Static Discharge: Not available |
| Fire Fighting Media and Instructions | ▪ Small Fire: Use dry chemical powder<br>▪ Large Fire: Use water spray, fog, or foam. Do not use water jet. |
| Protective Clothing (Fire) | ▪ 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 |
| Special Remarks on Fire Hazards | ▪ Do not use force stream as this could cause the fire to spread<br>▪ SCBA should be worn by fire fighters |

## SECTION 6: Accidental Release Measures

| | |
|---|---|
| Small Spill and Leak | ▪ Absorb with an inert material and put spilled material into appropriate waste disposal |
| Large Spill and Leak | ▪ Absorb with an inert material and put spilled material into appropriate waste disposal<br>▪ Do not allow any potentially contaminated water, including rain water, runoff from fire fighting or spills, to enter ay waterway, sewer or drain |

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

## SECTION 7: Handling and Storage

| | |
|---|---|
| Handling | ▪ Proper grounding procedures should be used as static charge may accumulate<br>▪ Avoid breathing vapors or spray mists<br>▪ Avoid contact with eyes, skin and clothing<br>▪ Always wash your hands after handling<br>▪ Do not cut, weld, heat or pressurize containers |

| | |
|---|---|
| Storage | ▪ Keep containers tightly closed<br>▪ Store in dry, cool, and ventilated areas<br>▪ Do not cut, weld, heat or pressurize empty containers<br>▪ Do not store near open flames or sources of ignition |

## SECTION 8: Exposure Controls and Personal Protection

| Personal Protection | |
|---|---|
| Eyes | ▪ Safety glasses, goggles or face shield 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 (Nitrile) |
| Feet | ▪ Shoes (as required by work place) |
| Protection for Large Spills | ▪ Splash goggles, full suit, vapor respirator, boots, chemical resistant gloves<br>▪ 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/m$^3$
- 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) | ▪ > 164ºC (> 327.2ºF) |
| Boiling/Condensation Point | ▪ Not established |
| Pour Point | ▪ -35ºC (-31ºF) to -24˚C (-11˚F) |
| Freezing Point | ▪ Not available |
| Specific Gravity | ▪ 0.82 – 0.84 g/ml (Water = 1g/ml) |
| Density | ▪ 6.84 – 7.01 lbs/US Gal |
| Vapor Pressure | ▪ < 0.1 mm Hg @ 20ºC (68ºF) |
| Vapor Density | ▪ Not established |
| % Volatility, by volume | ▪ Not available |
| Evaporation Rate | ▪ Negligible |

| | |
|---|---|
| VOC | ▪ N/A |
| Viscosity (cSt @ 40°C) | ▪ 7, 15, 22, 32, 46, 68, 100, 150, 220, 320, 460, 680, 1000 (typical) |
| Solubility in Water | ▪ Not soluble |

## 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 upon prolonged exposure, but will not injure eye tissue |
| Skin | ▪ Low toxicity. Prolonged exposure may irritate |
| Ingestion | ▪ Low toxicity |
| Inhalation | ▪ Negligible under normal conditions<br>▪ 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<br>▪ 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

## 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

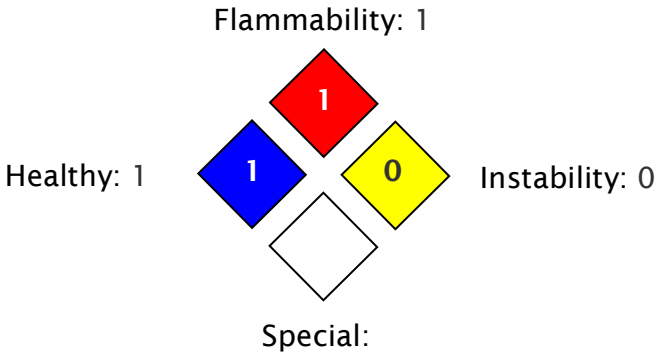
**United States: State Regulations**

- **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

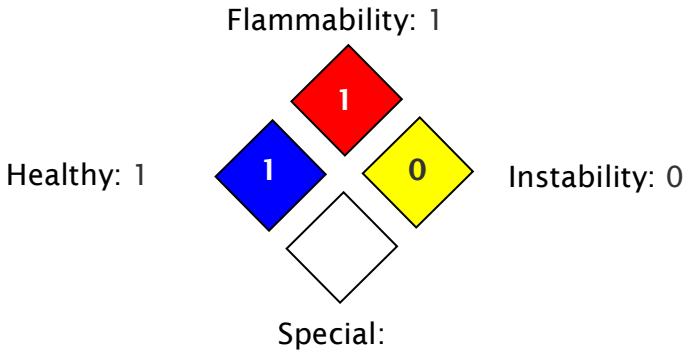
**Label Requirements**

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

**Hazardous Material Information System (USA):**

| | |
|---|---|
| **Health** | 1 |
| **Fire Hazard** | 1 |
| **Reactivity** | 0 |
| **Personal Protection** | B |

**National Fire Protection Association (USA):**

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|---|---|
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**Note to Reader**

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Authored By: Exact™ Specialty Products Technical Services, (519) 738-3503