





Exact™ Light and Heavy Chain Oils

Food Grade Chain and Lubricating Oils

About Exact™ Light and Heavy Chain Oils

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

Applications

Exact™ Chain Oils are best suited for:

- Food processing areas
- Drive and conveyor chains
- Bearing lubrication
- General purpose lubrication

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

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Performance Benefits

Exact™ Chain Oils provide the following benefits:

- Resists oxidation to help maintain sludge-free systems that deliver long fluid life, and decreased downtime while providing extended chain and metal lifetime
- Inhibit metal-to-metal contact in chains, sprockets and other moving wear parts
- Adheres to surfaces, eliminates oil run-off and is resistant to water washout
- Meets or exceeds FDA 21 CFR 178.3570 standards for lubricants with incidental food contact

Technically Speaking

| ISO Viscosity Grade | Light | Heavy |
|-------------------------|--------|--------|
| NSF Registration Number | 136905 | 136906 |
| Viscosity, cSt @ 40°C | 150 | 370 |
| Viscosity, cSt @ 100°C | 19.8 | 44 |
| Viscosity, SUS @ 100°F | 754 | 1900 |
| Viscosity, SUS @ 210°F | 100 | 213 |
| Viscosity Index | > 150 | > 150 |
| Flash Point, °C (COC) | > 230 | > 230 |
| Flash Point, °F (COC) | > 446 | > 446 |
| Pour Point, °C/°F | -10/14 | -10/14 |
| Rust, Dist. Water | Pass | Pass |
| Specific Gravity, g/mL | 0.845 | 0.852 |
| Density, lbs./US Gal | 7.05 | 7.11 |

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**

Exact™ Light and Heavy Chain Oils - Material Safety Data Sheet (MSDS)





SECTION 1: Product Information and Company Identification

Common Name Exact™ Light and Heavy Chain Oils

Product Code E2530, E2535

Material Use Food Grade Chain and Lubricating Oils Manufacturer Commonwealth Oil Corporation

Commonwealth Oil Corporation 2080 Ferriss Rd. N., Harrow ON.

Petroleum Hydrocarbon

breathing is difficult, give oxygen. Get

medical attention.

NOR 1G0

Liquid

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
Physical State

Emergency Overview • No specific hazard

Use with care

Follow good industrial hygiene practices
 Routes of Entry
 Dermal and eye contact, inhalation, ingestion

Potential Acuté Health Effects

Medical Conditions Aggravated By Overexposure
Overexposure Signs and Symptoms

None known
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

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If

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|--|
| lirected to do give anything ient. Should Il a physician. |
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| Flammability | Low hazard - combustible or burns at |
|---|---|
| | temperatures above flash point |
| Auto-Ignition Temperature | ■ 354°C (670°F) |
| Flash Point (COC) | > 200°C (> 392°F) |
| Flammable Limits | Not established |
| Hazardous Combustion Products | Products are smoke, carbon monoxide, carbon dioxide, and trace oxides of sulfur |
| 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 |
| | Risk in Presence of Static Discharge: Not available |
| Fire Fighting Media and Instructions | Small Fire: Use dry chemical powder |
| | 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 |
| | 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 |
| | 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

| | - J | |
|----------|-----|---|
| Handling | | 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 |
| | | |

Exact™ Light and Heavy Chain Oils - Material Safety Data Sheet (MSDS)

Storage

Keep containers tightly closed

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 | 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: 5 ma/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 |
| рН | ■ 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 | <pre>> 1 (Air = 1)</pre> |
| % Volatility, by volume | Not available |
| Evaporation Rate | Negligible |
| VOC | N/A |
| Viscosity (cSt @ 40°C) | 150, 370 (typical) |
| Solubility in Water | Not soluble |
| | |

Exact™ Light and Heavy Chain Oils - Material Safety Data Sheet (MSDS) SECTION 10: Stability and Reactivity

| Stability and Reactivity Incompatibility with Various Substances Hazardous Decomposition Products | Stable Reactive with strong oxidizing agents 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 Skin | Slightly irritating, but will not injure eye tissue Low toxicity. Prolonged exposure may irritate |
|--|--|
| Ingestion Inhalation | Low toxicityNegligible under normal conditions |
| Timatation | 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 Biodegradability/OECD Mobility Products of Degradation Products of Biodegradation Special Remarks on the Products of | Not established Not established Not established Not established Not established Not established |
|--|--|
| Biodegradation | |

SECTION 13: Disposal Considerations

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

Exact™ Light and Heavy Chain Oils - Material Safety Data Sheet (MSDS)

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

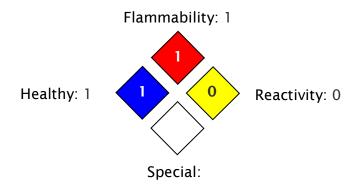
United States: State Regulations

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."

Exact™ Light and Heavy Chain Oils – Material Safety Data Sheet (MSDS) 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 | February 15, 2010 |
|------------------------|-------------------------------------|
| Date of Previous Issue | November 7, 2007 |

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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