



Nonfood Compounds
Program Listed H1

Exact™ Aluminum Complex FG Grease

Food Grade Aluminum Complex Machinery Grease (NLGI #2)

About Exact™ Aluminum Complex FG Grease (NLGI #2)

Exact™ Aluminum Complex FG Grease provides superior performance while providing the integrity you need for your operation, even during tough or wet conditions. Exact™ Aluminum Complex FG Grease is NSF H1 registered and CFIA approved as suitable for incidental contact with food. Exact™ Aluminum Complex FG Grease will provide excellent corrosion protection and, when used properly, will help to reduce grease intervals. It is recommended for high temperature applications, ball roller, journal and sliding bearings.


Applications

Exact™ Aluminum Complex FG Grease is best suited for:

- Valves
- Slideways
- Canners and packers
- Wrappers
- Toggle switches
- Packing glands
- Central lubricating systems

Available Packaging

These products are available in 400 gram cartridges, 17 kg. Pails, 55 kg. Kegs, and 180 kg. drums.

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Exact™ Aluminum Complex FG Grease

Food Grade Aluminum Complex Machinery Grease (NLGI #1 & #2)

Performance Benefits

Exact™ Aluminum Complex FG Grease provides the following benefits:

- Does not stain or contaminate clothing or porous surfaces
- Can handle a wide variety of applications, allowing you to reduce your inventory of greases
- Prevents damage in wet or moist operations
- High temperature stability
- Resistant to washout from water, steam and various sterilizing chemicals
- Protects against equipment corrosion
- Meets or exceeds FDA 21 CFR 178.3570 standards for lubricants with incidental food contact

Technically Speaking

Test	ASTM METHOD	TYPICAL RESULTS
NLGI Grade #		2
NSF Registration Number		139671
Thickener Type	D-128	Aluminum Complex
Penetration: 60 Strokes @ 25°C/77°F	D-217	260-300
Dropping Point: °C/°F	D-2265	240/464 Min.
Base Oil Characteristics		
Viscosity @ 40°C, cSt	D-445	220
Viscosity @ 100°C, cSt	D-445	19.4
Viscosity Index:	D-2270	100
Flash Point °C/°F	D-92	248/480
Colour	Visual	White
Appearance	Visual	Smooth
Oil Separation	D-1742	1.8
Water Washout @ 175°F	D-1264	3.8
Four Ball Weld, kg	D-2596	315
Timken Four Ball Wear, mm	D-2266	0.55
Water Content %	D-95	<0.01
Rust Rating:	D-1743	Pass

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™ Aluminum Complex FG Grease - Material Safety Data Sheet (MSDS)



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SECTION 1: Product Information and Company Identification

Common Name	Exact™ Aluminum Complex FG (NLGI #2) Grease
Product Code	E3005
Material Use	Food Grade Aluminum Complex Machinery Grease
Manufacturer	Summit Lubricants 4080 Pearl Street Road Batavia, N.Y 14020
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, %
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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	▪ Complex mixture
Physical State	▪ Semi-solid
Emergency Overview	▪ No specific hazard ▪ Use with care ▪ 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	▪ Repeated or prolonged exposure is not known to aggravate medical conditions.
Overexposure Signs and Symptoms	▪ Not available

- See SECTION 11 for Toxicological Data

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SECTION 4: First Aid Measures

Eye Contact	<ul style="list-style-type: none">▪ Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes. Cold water may be used. Get medical attention should irritation occur.
Skin Contact	<ul style="list-style-type: none">▪ Remove any contaminated clothing. Wash with soap and water. Get medical attention should irritation occur.
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 so by medical personnel. Never give anything by mouth to an unconscious patient. Should large amounts be swallowed, call a physician immediately.
Note to Physician	<ul style="list-style-type: none">▪ Not available

SECTION 5: Fire Fighting Measures

Flammability	<ul style="list-style-type: none">▪ Low hazard – combustible or burns at temperatures above flash point
Auto-Ignition Temperature	<ul style="list-style-type: none">▪ N/A
Flash Point (COC)	<ul style="list-style-type: none">▪ 248°C/480°F
Flammable Limits	<ul style="list-style-type: none">▪ Not established
Hazardous Combustion Products	<ul style="list-style-type: none">▪ Products are smoke, carbon oxides
Fire Hazard in Presence of Various Substances	<ul style="list-style-type: none">▪ Flammable in presence of open flames, spark, static discharge and at or above flash point
Explosion Hazard in Presence of Various Substances	<ul style="list-style-type: none">▪ Risk in Presence of Mechanical Impact: Not available▪ Risk in Presence of Static Discharge: Not available
Fire Fighting Media and Instructions	<ul style="list-style-type: none">▪ Small Fire: Use dry chemical powder▪ Large Fire: Use water spray, fog, or foam. Do not use water jet.
Protective Clothing (Fire)	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ Container explosion may occur under fire conditions or where heated. Cool closed containers exposed to heat.

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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 any waterway, sewer or drain.
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- See SECTION 8 for Personal Protective Equipment and SECTION 13 for Waste Disposal

SECTION 7: Handling and Storage

Handling

- Avoid breathing vapors or spray mists.
- Use with adequate ventilation.
- Avoid contact with eyes, skin and clothing.
- Always wash your hands after handling.

Storage

- Proper grounding procedures should be used as static charge may accumulate.
 - Keep containers tightly closed.
 - Store in dry, cool, and well ventilated areas.
 - Do not cut, weld, heat or pressurize empty containers.
 - Do not store near open flames or sources of ignition.
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SECTION 8: Exposure Controls and Personal Protection

Personal Protection

Eyes

- Safety glasses or goggles

Body

- Lab coat or suitable protective clothing

Respiratory

- Not required under normal and intended usage conditions

Hands

- Chemical resistant or oil impervious gloves

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
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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 mg/m³
- Form: Mist

Consult your local authorities for your acceptable exposure limits

SECTION 9: Physical and Chemical Properties

Physical State	▪ Semi–solid
Appearance and Colour	▪ White
Odour	▪ Bland
pH	▪ N/A
Flash Point (COC)	▪ 280°C (480°F)
Boiling/Condensation Point	▪ >371.1°C/700°F
Pour Point	▪ Not available
Freezing Point	▪ Not available
Specific Gravity	▪ 0.89 (Water = 1g/mL)
Density	▪ 7.43
Vapor Pressure	▪ N/A
Vapor Density	▪ N/A
% Volatility, by volume	▪ Negligible
Evaporation Rate	▪ Negligible
VOC	▪ N/A
Viscosity (cSt @ 40°C)	▪ N/A
Solubility in Water	▪ Not soluble

SECTION 10: Stability and Reactivity

Stability and Reactivity	▪ Product is stable
Incompatibility with Various Substances	▪ Reactive with strong oxidizing agents
Hazardous Decomposition Products	▪ Fumes, smoke, carbon monoxide and carbon dioxide.
Hazardous Polymerization	▪ Will not occur

Exact™ Aluminum Complex FG Grease - Material Safety Data Sheet (MSDS)

SECTION 11: Toxicological Information

Toxicity Data

Ingredient Name	Concentration
<i>None Known</i>	

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.
- Incinerate waste materials whenever possible.

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

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SECTION 15: Regulatory Information

United States: Federal Regulations

- TSCA 8(b) Inventory: All components 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

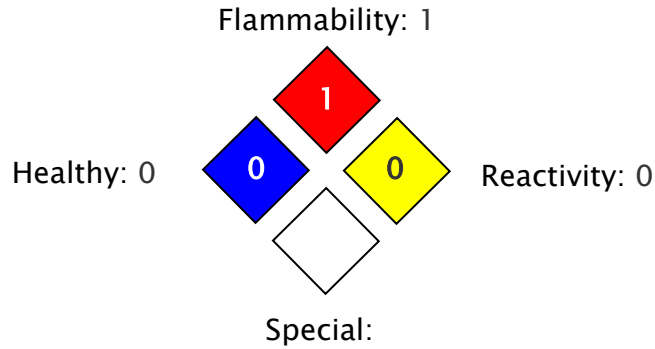
- California Prop. 65: No products found.

Canada: WHMIS

- Not a controlled product under WHMIS (Canada)
- CEPA DSL: All components 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	0
Fire Hazard	1
Reactivity	0
Personal Protection	B

National Fire Protection Association (USA):

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Note to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the 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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