

Omega 68

DESCRIPTION:

Omega 68 Superior “FG Plus” Machinery Grease is formulated with calcium sulfonate complex thickener and a well-balanced package of FDA approved additives and white oil to satisfy the stringent maintenance requirements demanded by the MRO professionals in the food & beverage industry. Manufactured under strict quality control system, Omega 68 is NSF H1-listed and is certified by Halal & Kosher quality organizations. Omega 68 is a reliable and versatile food grade grease suitable for use in virtually all processing equipment operating over a wide range of temperatures in the food & beverage and pharmaceutical industries.



UNIQUE THICKENER SYSTEM:

Omega 68 is formulated with the advanced calcium sulfonate complex thickener system. Greases manufactured from this thickening system have, upon numerous on-site field tests and applications, the following advantages over other types of greases, such as lithium and aluminum complex thickened ones:

- Excellent load-carrying and anti-wear properties,
- Exceptional corrosion protection,
- Extremely resistant to water washout & spray-off, and
- Superb resistance to shear forces

The advanced calcium sulfonate complex thickener of Omega 68 is made up of multiple layers of thin; wafer-like crystalline calcite. These crystalline layers, by reacting specially to the rubbing or sliding forces, transform into boundary films to protect the metal surfaces from damaging metal to metal wear. The unique structure of calcium sulfonate complex thickener, which carries sulfonate ions, also serves as protective barrier to corrosion and water (even salt water).

This thickener system, combined with Omega's proprietary package of additives, enables Omega 68 to offer excellent mechanical, thermal and oxidation stabilities. Proven by tests, Omega 68 retains its texture and consistency in the presence of water and at high temperatures. It stays tenaciously in place to protect the lubricated components exposed frequently to heat and water.

MEETS VARIOUS FOOD-RELATED QUALITY STANDARDS:

Omega 68 is manufactured according to ISO 21469 which supports producers who adopt Hazard Analysis and Critical Control Points (HACCP) and Good Manufacturing Practice (GMP) programs. HACCP and GMP are both systems intended to ensure the safety of food, chemicals and pharmaceuticals. GMP is the "first step" to food safety, as a series of principles to be fulfilled to ensure that products meet stringent requirements of safety and quality. It can be one of the components of HACCP, which is a systematic approach to production that is designed to prevent hazards from occurring.

Omega 68 is also manufactured in accordance with the strict Halal and Kosher quality standards. A designated production line/area is used to manufacture Omega 68. This special grease production line/area is completely segregated to avoid cross-contamination caused by any prohibited materials according to the requirements of Halal & Kosher quality standards.

WIDE RANGE OF SERVICE TEMPERATURES:

With the manufacturing technology developed over the past decade, the low temperature performance of calcium sulfonate complex greases has been improved a lot, without compromising the high-temperature properties. By applying the most state-of-the-art thickening technology and subsequently, by optimizing the content of thickener, Omega 68 exhibits excellent pumpability and fluidity at freezing temperatures. Omega 68 performs well at extreme temperature conditions: down to -40°C and up to 200°C. Combined this broad range of service temperatures with the other outstanding features specified above, Omega 68 is surely a versatile lubrication solution to the food & beverage processing machineries.

APPLICATIONS:

Omega 68 is quality designed to provide prolonged protection and lubrication to bearings and/or grease-lubricated parts of processing machineries frequently exposed to water, heat, and high & shock loads. NSF H1-listed and Halal & Kosher certified, Omega 68 can be applied in virtually all food and food-related industries: Bakeries, Beverage Bottling and Canning, Breweries and Wineries, Dairy Products, Fish and Seafood Processing, Fruits and Vegetables, Food and Beverage Containers, Meat and Poultry Processing, Pet Foods, Pharmaceutical, Prepared Foods, Snack Foods, etc.

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT
Appearance	Visual	Smooth, Tan
Density @ 20°C, g/cm ³	D-1298	0.96
Base Oil Viscosity, cSt @ 40°C	D-445	100
Worked Penetration,	D-217	265 - 295
Dropping Point, °C	D-2265	≥ 300
Four Ball Wear Test, mm	D-2266	≤ 0.5
Four Ball Weld Point, Kg	D-2596	500
Corrosion-Preventive Properties	D-1743	Pass
Copper Strip Corrosion	D-4048	1a
Recommended Application Temperatures, °C	--	-40 to 204 (Minus Forty to Two Hundred and Four)

The characteristics given above are typical of current production only and slight batch to batch variations should be expected.

SAFETY DATA SHEET



Product name: Omega 68
Supersedes date: 2015-05-12
Product No.:

Page: 1/9
Last revised date: 2016-05-09
SDS-ID: GB-EN/2.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: Omega 68
Container size: 400 mg / 5kg / 15kg **Manufactured in USA**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Application: Lubricating grease.

1.3. Details of the supplier of the safety data sheet

Supplier: EU importer: Sovereign Lubricants (UK) Ltd, Crowtrees Lane,
Rastrick, West Yorkshire, HD6 3LZ
T: 01484 718674 - F: 01484 400164
enquiries@sovereign-omega.co.uk
www.sovereign-omega.co.uk

Manufacturer ITW PP & F Korea Limited.
13th Fl., Unit B, PAX Tower
609 Eonju-ro, Gangnam-gu
Seoul, Korea 06108
Tel:+82-2-2088-3560
Fax:+82-2-513-3567
www.magnagroup.com

1.4. Emergency telephone number

Emergency telephone: Call a Poison Center, emergency number or doctor/physician.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not classified.

2.2. Label elements

The substance/mixture does not meet the criteria for classification and labelling.

2.3. Other hazards

Other: Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. The harmful effects may increase in used grease.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: mineral oil and additives.

No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

SAFETY DATA SHEET

Product name:	Omega 68	Page:	2/9
Supersedes date:	2015-05-12	Last revised date:	2016-05-09
Product No.:		SDS-ID:	GB-EN/2.0

CLP:

%:	CAS-No.:	EC No.:	REACH Reg. No.:	Chemical name:	Hazard classification:	Notes:
50-75	8042-47-5	232-455-8	01-2119487078-27-XXXX	White mineral oil (petroleum) -		L

Notes: L: DMSO < 3% (IP 346)

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation: Move into fresh air and keep at rest. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

Ingestion: Do not induce vomiting. Rinse mouth. If symptoms persist, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

4.3. Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media: Small fires: Extinguish with carbon dioxide or dry powder.
Larger fires: Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Specific hazards: During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SAFETY DATA SHEET

Product name:	Omega 68	Page:	3/9
Supersedes date:	2015-05-12	Last revised date:	2016-05-09
Product No.:		SDS-ID:	GB-EN/2.0

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid contact with skin and eyes. Follow precautions for safe handling described in this safety data sheet.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Absorb spillage with oil-absorbing material. Clean contaminated area with oil-removing material.

6.4. Reference to other sections

References: For personal protection, see section 8.
For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Observe good chemical hygiene practices. Avoid prolonged and repeated contact with grease, particularly used grease. Always remove grease with soap and water or skin cleaning agent, never use organic solvents.

Technical measures: Work practice should minimise contact.

Technical precautions: When working with heated grease, mechanical ventilation may be required.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: Store in tightly closed original container.

Storage conditions: Store in a cool and well-ventilated place.

7.3. Specific end use(s)

Specific use(s): No information available.

SAFETY DATA SHEET

Product name:	Omega 68	Page:	4/9
Supersedes date:	2015-05-12	Last revised date:	2016-05-09
Product No.:		SDS-ID:	GB-EN/2.0

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No occupational exposure limit assigned.

8.2. Exposure controls

<u>Engineering measures:</u>	Provide adequate ventilation. When working with heated grease, mechanical ventilation may be required. Provide access to washing facilities incl. soap, skin cleanser and fatty cream.
<u>Personal protection:</u>	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
<u>Respiratory equipment:</u>	In case of inadequate ventilation use suitable respirator. Use respiratory equipment with particle filter, type P2.
<u>Hand protection:</u>	Risk of contact: Wear protective gloves. Nitrile gloves are recommended. Other types of gloves can be recommended by the glove supplier.
<u>Eye protection:</u>	Risk of contact: Wear goggles/face shield.
<u>Hygiene measures:</u>	Wash hands after handling.
<u>Environmental Exposure Controls:</u>	Not available.

SAFETY DATA SHEET

Product name:	Omega 68	Page:	5/9
Supersedes date:	2015-05-12	Last revised date:	2016-05-09
Product No.:		SDS-ID:	GB-EN/2.0

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<u>Appearance:</u>	Grease.
<u>Colour:</u>	Transparent. / Light yellow.
<u>Odour:</u>	Weak. Characteristic.
<u>Odour threshold:</u>	Not determined.
<u>pH:</u>	Not applicable.
<u>Melting point / freezing point:</u>	Not determined.
<u>Boiling point:</u>	218 °C
<u>Flash point:</u>	>112 °C
<u>Evaporation rate:</u>	Not applicable.
<u>Flammability (solid, gas):</u>	Not determined.
<u>Explosive limits</u>	Not determined.
<u>Vapour pressure:</u>	Not applicable.
<u>Vapour density:</u>	Not applicable.
<u>Relative density:</u>	~0.96
<u>Solubility:</u>	Insoluble in water.
<u>Partition coefficient (n-octanol/water):</u>	Not determined.
<u>Auto-ignition temperature (°C):</u>	Not determined.
<u>Decomposition temperature (°C):</u>	Not determined.
<u>Viscosity:</u>	Not applicable.
<u>Explosive properties:</u>	Not applicable.
<u>Oxidising properties:</u>	Not applicable.

9.2. Other information

<u>Other data:</u>	Organic solvents. 0% Volatile Organic Compound (VOC): 0%
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SAFETY DATA SHEET

Product name:	Omega 68	Page:	6/9
Supersedes date:	2015-05-12	Last revised date:	2016-05-09
Product No.:		SDS-ID:	GB-EN/2.0

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Not reactive.

10.2. Chemical stability

Stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Reactions: None known.

10.4. Conditions to avoid

Conditions to avoid None known.

10.5. Incompatible materials

Incompatible materials: Strong oxidising substances.

10.6. Hazardous decomposition products

Hazardous decomposition products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

The harmful effects may increase in used grease.

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive Toxicity: Based on available data, the classification criteria are not met.

STOT - Single exposure: Based on available data, the classification criteria are not met.

STOT - Repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Inhalation of oil mist or vapours formed during heating of the product will irritate the respiratory system and provoke coughing.

Skin contact: Degreasing. Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

Eye contact: Direct contact may irritate.

Ingestion: May irritate and cause malaise.

Specific effects: Prolonged or repeated contact with used grease may cause serious skin diseases, such as dermatitis.

SAFETY DATA SHEET

Product name:	Omega 68	Page:	7/9
Supersedes date:	2015-05-12	Last revised date:	2016-05-09
Product No.:		SDS-ID:	GB-EN/2.0

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: Greases are generally hazardous to the environment.

12.2. Persistence and degradability

Degradability: The product is expected to be slowly biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT/vPvB: Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code: 20 01 26

SAFETY DATA SHEET

Product name: Omega 68 Page: 8/9
Supersedes date: 2015-05-12 Last revised date: 2016-05-09
Product No.: SDS-ID: GB-EN/2.0

SECTION 14: TRANSPORT INFORMATION

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

UN-No: -

14.2. UN proper shipping name

Proper Shipping Name: -

14.3. Transport hazard class(es)

Class: -

14.4. Packing group

PG: -

14.5. Environmental hazards

Marine pollutant: -

Environmentally Hazardous -

substance:

14.6. Special precautions for user

Special precautions: -

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk: -

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, with amendments.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
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EH40/2005, Workplace exposure limits 2005, with amendments.
The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2. Chemical Safety Assessment

CSA status: No information available.

SAFETY DATA SHEET

Product name:	Omega 68	Page:	9/9
Supersedes date:	2015-05-12	Last revised date:	2016-05-09
Product No.:		SDS-ID:	GB-EN/2.0

SECTION 16: OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 1

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The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

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