



# **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 bv 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.



# 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 Vegetables, Food and Beverage and Containers, Meat and Poultry Processing, Pet Foods, Pharmaceutical, Prepared Foods, Snack Foods, etc.



# 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



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Rev. Date: 2 Jan 2019		
Reference: CKL		

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.

# 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.

TEST	ASTM TEST METHOD	TEST RESULT
Appearance	Visual	Smooth, Tan
Density @ 20°C, g/cm <sup>3</sup>	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)

# TYPICAL DATA:

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



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Reference: CKL		



Product name: Supersedes date: Product No.:

Omega 68 2019-02-14

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1.1. Product identifier			
Product name:	Omega 68		
<u>Container size:</u>	400 mg / 5kg / 15kg		
1.2. Relevant identified uses	of the substance or mixture and	<u>d uses advised aga</u>	ainst
Application:	Lubricating grease.		
1.3. Details of the supplier of	the safety data sheet		
Supplier:	GB importer:	Distributed by:	Trust Engineering Company
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 magna@magnagroup.com www.magnagroup.com		9 Abdel Hamid El Deeb Street Alexandria, 21613 Egypt T: +(20)3 5822779 T: +(20)10 1223554 5 Ahmed Shaker Street Fourth Zone Nasr City, 11586 Egypt T:+(20)2 26909965 T: +(20)10 122355 info@trustengineering-eg.com
Further information can be obtained from:	magna@magnagroup.com		www.trustengineering-eg.com
<u>1.4. Emergency telephone nu</u>			
Emergency telephone:	Call a Poison Center, emerge NHS: 111	ency number or do	ctor/physician.
SECTION 2: HAZARDS II	DENTIFICATION		
2.1. Classification of the subs	<u>stance or mixture</u>		
<u>CLP:</u>	The product is not classified.		
2.2. Label elements	The substance/mixture does	not meet the criter	ia for classification and labelling.
	Safety data sheet available o	n request.	
2.3. Other hazards			
<u>PBT/vPvB:</u>	This product does not contain	n any PBT or vPvE	3 substances.
<u>Other:</u>	Prolonged or repeated contact	ct with skin may ca	ause redness, itching, irritation and

eczema/chapping. The harmful effects may increase in used grease.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

Product name:	Omega 68	Page:	2/11
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The product contains: mineral oil and additives.

Only classified substances above threshold limits or substances with an exposure limit are shown. All substances in the product are either registered or exempt from registration under REACH.

CLP:

<u>%:</u>	CAS-No.:	EC No.:	REACH Reg. No:	Chemical name:	Hazard classification:	Notes:
>70	8042-47-5	232-455-8	-	White mineral oil (petroleum)	) -	L
1-<10	61789-86-4	263-093-9	-	Sulfonic acids, petroleum, calcium salts	Skin Sens. 1B;H317	SCL
1-<10	68584-23-6	271-529-4	-	Benzenesulfonic acid, C10- 16-alkyl derivs., calcium salts	Skin Sens. 1B;H317	SCL
1-<10	70024-69-0	274-263-7	-	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Skin Sens. 1B;H317	SCL
1-<3	26264-06-2	247-557-8	-	Calcium dodecylbenzenesulphonate	Skin Irrit. 2;H315 Eye Dam. 1;H318	

Chemical name:	SCL	<u>M</u> (ac)	<u>M</u> (chr)	)
White mineral oil (petroleum)			-	-
Sulfonic acids, petroleum, calcium salts	Skin Sens. 1B;H317: C ≥ 10%		-	-
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	Skin Sens. 1B;H317: C ≥ 10%		-	-
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Skin Sens. 1B;H317: C ≥ 10%		-	-
Calcium dodecylbenzenesulphonate			-	-
Notes:				
	L: DMSO < 3% (IP 346)			

References:

The full text for all hazard statements is displayed in section 16.

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## **SECTION 4: FIRST AID MEASURES**

4.1. Description of first aid me	easures	
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 at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.	
Ingestion:	Immediately rinse mouth and drink 1-2 glasses of water. Keep person under observation. If uncomfortable: Transportation to hospital. Bring along these instructions.	
4.2. Most important symptoms and effects, both acute and delayed		

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

Symptoms/effects:

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

<u>Specific hazards:</u> During fire, gases hazardous to health may be formed.

# 5.3. Advice for firefighters

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

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## 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.

<u>Technical precautions:</u> When working with heated grease, mechanical ventilation may be required.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures for safe<br/>storage:Store in tightly closed original container.Storage conditions:Store in a cool and well-ventilated place.

## 7.3. Specific end use(s)

<u>Specific use(s):</u> No information available.

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# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1. Control parameters

No occupational exposure limit assigned.

	8.2. I	Exposure	controls
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Engineering measures:	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.
Personal protection:	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Respiratory equipment:	In case of inadequate ventilation use suitable respirator. Use respiratory equipment with particle filter, type P2.
Hand protection:	Risk of contact: Wear protective gloves. Nitrile gloves are recommended. Breakthrough time: > 4h; Thickness: > 0.3 mm The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.
Eye protection:	Risk of contact: Wear goggles/face shield.
Hygiene measures:	Wash hands after handling.
Environmental Exposure Controls:	Not available.

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# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic phys	ical and chemical properties
Physical state:	Grease.
<u>Colour:</u>	Light brown.
<u>Odour:</u>	Weak. Characteristic.
Odour threshold:	Not available.
<u>pH:</u>	Not available.
Melting point / freezing point:	Not determined. Not available.
Boiling point:	218 °CNot available.
Flash point:	>112 °CNot available.
Evaporation rate:	Not applicable. Not available.
Flammability (solid, gas):	Not determined.
Explosive limits	Not determined. Not available.
Vapour pressure:	Not applicable. Not available.
Vapour density:	Not available.
Relative density:	~0.96
<u>Solubility:</u>	Insoluble in water.
Partition coefficient (n- octanol/water):	Not determined.
<u>Auto-ignition</u> temperature (°C):	Not determined.
Decomposition temperature (°C):	Not determined. Not available.
<u>Viscosity:</u>	Not available.
Explosive properties:	Not applicable.
Oxidising properties:	Not applicable.
9.2. Other information	
<u>Other data:</u>	Organic solvents. 0% Volatile Organic Compound (VOC): 0%

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SECTION 10: STABILITY AND REACTIVITY		
10.1. Reactivity		
Reactivity:	Not reactive.	
10.2. Chemical stability		
<u>Stability:</u>	Stable under normal temperature conditions.	
10.3. Possibility of hazardous reactions		
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.	

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## 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:	Not classified. On basis of test data.	
<u>Respiratory or skin</u> 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.	
11.2. Information on other hazards		

# 11.2. Information on other hazards

Endocrine disrupting<br/>properties:The product does not contain any substance identified as having endocrine<br/>disrupting properties.

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## SECTION 12: ECOLOGICAL INFORMATION

## 12.1. Toxicity

Ecotoxicity: Greases are generally hazardous to the environment.

#### 12.2. Persistence and degradability

<u>Degradability:</u> The product is expected to be slowly biodegradable.

#### 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available on bioaccumulation.

## 12.4. Mobility in soil

## 12.5. Results of PBT and vPvB assessment

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

#### 12.6. Endocrine disrupting properties

<u>Endocrine disrupting</u> The product does not contain any substance identified as having endocrine disrupting properties.

## 12.7. 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

<u>Contaminated packaging:</u> Dispose of contaminated packings as residue.

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## **SECTION 14: TRANSPORT INFORMATION**

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

<u>PG:</u>

## 14.5. Environmental hazards

Marine pollutant:

# Environmentally Hazardous

substance:

#### 14.6. Special precautions for user

Special precautions: Not relevant.

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

Transport in bulk: Not relevant.

## SECTION 15: REGULATORY INFORMATION

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

National regulation:	UK Statutory Instruments, 2021 No. 904, CONSUMER PROTECTION ENVIRONMENTAL PROTECTION HEALTH AND SAFETY. The REACH etc. (Amendment) Regulations 2021. 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. The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No. 720), as amended
	<ul> <li>720), as amended.</li> <li>EH40/2005, Workplace exposure limits 2005, with amendments.</li> <li>The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).</li> </ul>

#### 15.2. Chemical Safety Assessment

CSA status:

No chemical safety assessment has been carried out.

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## **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, 2, 3, 4, 6, 8, 11, 12, 13, 15, 16.

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Abbreviations and acronyms	
used in the safety data sheet:	CSA= Chemical Safety Assessment.
	PBT = Persistent, Bioaccumulative and Toxic.
	vPvB = very Persistent and very Bioaccumulative.

Wording of H-statements:	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

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.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark. www.dhigroup.com.