

Omega 85

“SHEAR SENSATION PLUS”

DESCRIPTION:

Omega 85 "Shear Sensation Plus" (SSP) all-purpose grease is an improved version of unique and continuing Omega research into the development of a single grease to meet virtually any automotive and industrial application. "Shear Sensation Plus" (SSP) is an improved formulation and features the same phenomenal shear stability that remains unmatched by any ordinary grease!

UNMATCHED SHEAR STRENGTH:

Through extensive laboratory and field testing, Omega engineers have further improved the shear stability built into Omega 85 "Shear Sensation Plus", while retaining Omega 85's truly multi-purpose functionality.

SUPERIOR TEMPERATURE STABILITY:

Omega 85 "Shear Sensation Plus" (SSP) features an improved dropping point in excess of 520°F (270°C) for the NLGI # 2 grade coupled with the legendary continuously-effective Extreme Pressure performance and thermally-stable base oil. Omega 85 SSP continues to be eminently suited for prolonged superlative lubrication performance at elevated temperatures.

Due to the especially improved high quality base oil used and good penetration properties built into Omega 85, it retains its excellent low temperature lubrication characteristics.

INBUILT COMPATIBILITY:

Omega 85 SSP continues to be fully compatible with bearing seal materials such as hytel, viton and neoprene. It also provides excellent compatibility with soap-thickened greases (such as lithium-based) and will not adversely co-react when used in such applications where residuals of these may remain.

TRUE MULTI-PURPOSE CAPABILITY:

With Omega 85 SSP, there is virtually no limit to application recommendations. It can be applied with superlative lubrication results in automotive and industrial plain and anti-friction bearings, in hot or cold environments and subjected to light, medium or heavy loads - even over super-extended periods of operation.

SUPERIOR THICKENER AND ADDITIVES PACKAGE:

Omega 85 SSP's unique, advanced and improved constituents provide outstanding resistance to water and encompasses a "moisture-lock" to provide excellent protection against rust. It therefore effectively tolerates wet working environments. In continuing development testing, Omega 85 SSP retains its superlative properties after 3,000 hours in the ASTM-D-3336 long-life bearing test at 300°F (1,000 hours is already considered outstanding performance) !!!

Omega 85 "Shear Sensation Plus" continues to stand out as a superior multi-purpose grease that covers virtually the entire spectrum of lubrication applications in the automotive and industrial field and fully the equal of the widest range of applications, environment and application conditions to be found anywhere.

Omega 85 SSP also continues to provide extended superior performance and represents the highest-level of technical excellence in the field of lubrication ever developed for commercial applications.

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT	
		NLGI#2	NLGI#0
Mineral Oil Base: -			
Viscosity, cSt @ 40°C (104°F)	D-445	126	126
Viscosity, cSt @ 100°C (212°F)	D-445	11.7	11.7
Viscosity, Index	D-2270	75	75
Unworked Penetration @ 77°F	D-217	278	362
Worked Penetration: -			
60 Strokes	D-217	280	366
10,000 Strokes	D-217	293	376
100,000 Strokes	D-217	310	-
Dropping Point, °C (°F)	D-2265	270 (520)	257 (495)
Roll Stability (% Change)	D-1831	292 (+4.3)	410 (+10.2)
Rust Prevention	D-1743	Pass	
Timken, OK Load, Lbs	D-2509	60	-
Oil Separation, % Loss	D-1742	0.3	-
Four-Ball Wear Protection,			
Scar Diameter, mm	D-2266	0.4	0.37
Four-Ball EP Performance			
Load Wear Index	D-2596	100	-
Weld Point, Kgf	D-2596	500	400
Water Washout			
Percentage (%) Loss, @ 100°F		N/A	N/A
Percentage (%) Loss, @ 175°F		2	
Mobility at 0°F, gm/sec	USS Method	0.20	0.64
Operating Temperature Range	--	-10 to 230°C	
°C (°F)		(14 to 446°F)	
Color	--	Royal Blue	

Omega 85 "Shear Sensation Plus" exceeds the requirements of specification NLGI GC/LB (ASTM D-4950).

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Product No.:

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

1.1. Product identifier

Product name: Omega 85
Container size: 400 g, 5 kg, 15 kg, 55 kg, 200 kg **Manufactured in Spain**

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

CLP: Not classified.

2.2. Label elements

Safety data sheet available on request.

2.3. Other hazards

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: mineral oil and additives.
Only classified substances above threshold limits are shown.

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CLP:

<u>%:</u>	<u>CAS-No.:</u>	<u>EC No.:</u>	<u>REACH Reg. No.:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
5-10	43136-14-7		01-0000015620-79-	3,3'-Dioctadecyl-1,1'-methylenebis(4,1-phenylene)diurea	Aquatic Chronic 4;H413	

Notes: DMSO<3% (IP 346)

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

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: Rinse mouth with water. Do not induce vomiting. 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.
Do not use water jet as an extinguisher, as this will spread the fire.
Move container from fire area if it can be done without risk.

5.2. Special hazards arising from the substance or mixture

Specific hazards: During fire, gases hazardous to health may be formed.
Do not allow runoff to sewer, waterway or ground.

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.

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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. Eliminate all sources of ignition. 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 in vermiculite, dry sand or earth and place into containers. 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.
Do not eat, drink or smoke when using the product.

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: No special precautions.

Storage conditions: Store in tightly closed original container. (5-40°C)
Protect against direct sunlight.

7.3. Specific end use(s)

Specific use(s): No information available.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No occupational exposure limit assigned.

8.2. Exposure controls

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. 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.

Skin protection: Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures: Wash hands after contact. Change contaminated clothing.

Environmental Exposure Controls: Not available.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<u>Appearance:</u>	Grease.
<u>Colour:</u>	Blue.
<u>Odour:</u>	Characteristic.
<u>Odour threshold:</u>	Not available.
<u>pH:</u>	Not available.
<u>Melting point / freezing point:</u>	Not available.
<u>Boiling point:</u>	Not available.
<u>Flash point:</u>	>200 °C
<u>Evaporation rate:</u>	Not available.
<u>Flammability (solid, gas):</u>	Not available.
<u>Explosive limits</u>	Not available.
<u>Vapour pressure:</u>	Not relevant.
<u>Vapour density:</u>	Not relevant.
<u>Relative density:</u>	1,038 (20°C)
<u>Solubility:</u>	Immiscible with water
<u>Partition coefficient (n-octanol/water):</u>	Not available.
<u>Auto-ignition temperature (°C):</u>	Not available.
<u>Decomposition temperature (°C):</u>	Not available.
<u>Viscosity:</u>	Not available.
<u>Explosive properties:</u>	Not available.
<u>Oxidising properties:</u>	Not available.

9.2. Other information

<u>Other data:</u>	No information available.
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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 Avoid exposure to high temperatures or direct sunlight. Protect from moisture.

10.5. Incompatible materials

Incompatible materials: Avoid contact with acids and oxidising substances.

10.6. Hazardous decomposition products

Hazardous decomposition products: During fire, gases hazardous to health may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

The harmful effects may increase in used grease.

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.

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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: No data available.

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

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: -

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SECTION 15: REGULATORY INFORMATION

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

National regulation: Statutory Instruments 2008 No. 2852 - The REACH Enforcement Regulations 2008.
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 chemical safety assessment has been carried out.

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

Omega Manufacturing Division
13th floor, Unit B, PAX Tower, 609 Eonju-ro,
Gangnam-Gu, Seoul, Korea 06108
Tel : +82-2-2088-3560
Fax : +82-2-513-3567
Web site : www.magnagroup.com

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Wording of H-statements:

H413 May cause long lasting harmful effects to aquatic life.

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.
