

DESCRIPTION:

Omega 51 is a highly versatile grease that is ideally suited for use in all high speed electric motors and bearings, including roller, needle, and practically all other types of bearings.

HIGH-PURITY:

Omega 51 is a premier-purity lubricant and as such, should not be mixed with, or come into contact with ordinary greases. Systems and parts should be thoroughly flushed before using Omega 51.

ADDED ADHESIVENESS:

Omega 51 ensures a surface tenacity that no ordinary lubricant can provide. Omega 51 will stay in position, even under washout conditions, thus ensuring long production runs under cooler and more protective conditions.

EXTENSIVE RESEARCH:

Omega 51 is a premier-purity lubricant and as such, should not be mixed with, or come into contact with ordinary greases. Systems and parts should be thoroughly flushed before using Omega 51.

SUPPLEMENTS:

Color Coding	Yes
Exceptional Shear Stability	Yes
Extreme Pressure Properties	Yes
Megalite Supplements	Yes
Molybdenum Disulfide	Yes
Oxidation Resistors	Yes
Performance Improvers	Yes
Rust Inhibitors	Yes
Water Resistance Additives	Yes

PREVENTION OF WEAR AND LONGER EQUIPMENT LIFE:

Omega 51 ensures that equipment moving parts are protected and, as a result, the operational lifespan of the equipment is greatly increased, thereby assuring the continued function of the equipment.

LOWER COEFFICIENT OF FRICTION:

Omega 51, due to its lower coefficient of friction, heralds a new era in bearing speed capacity. Omega 51 contains a specially developed gellant that enables formerly limited speed bearings to undertake considerably more efficient and productive speeds in keeping with modern equipment design and construction.

APPLICATIONS:

Omega 51 can be used in any number of different and varied operations: Ball Bearings, Roller Bearings, Needle Bearings, High (and Low) Speed Bearings Conveyors, Cranes, Crushers, Paper Mill Machinery and Equipment, Pumps, Winches, Hammer Mills and many other operations. This lubricant provides maximum equipment protection for longer periods because it ensures total surface coverage, even under extreme conditions.

Omega 51 can be used as a single, multi-purpose grease on construction projects, steel mills and all type of bearings including hand-packed bearings, grease fittings, wheel bearings and many others.



OPIM51-1	Ver. 2.0	Rev. 4.0
Rev. Date: 29	Feb 2023	
Reference: CK	L	

TYPICAL DATA:

Omega 51 meets and exceeds Ford MIC 75B Specifications.

TEST	ASTM EST METHOD	TEST RESULT
Mineral Oil Base: -		
Viscosity @ 40ºC, cSt	D-445	150
Viscosity @ 100ºC, cSt	D-445	14.5
Flash Point, COC, °C (°F)	D-92	221(430)
Pour Point, COC, °C (°F)	D-97	-15(5)
Dropping Point, °C (°F)	D-566	176(350)
Worked Penetration @77°C, 150 gm cone	D-217	265-295
Timken OK Load, Ibs. min.	D-2509	45
Rust Prevention	D-1743	#1 rating
Oxidation Stability, lbs. loss in 100 hrs.	D-942	5.0
Water Washout, % loss after 2 hrs. @ 175°F	D-1264	7.0
Lubricant Stability	-	#1 rating
NLGI Grade	-	#2
Operating Temperature Range °C (°F)	-	-7 to 148 (20 to 300)
Color	-	Moly Grey

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



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 2022-12-30

 SDS-ID:
 GB-EN/8.0

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

Omega 51

2019-02-19

1.1. Product identifierProduct name:Omega 51

Container size: 15 kg

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

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.comRastrick, West Yorkshire, HD6 3LZ T:01484 718674 - F: 01484 400164 enquiries@sovereign-omega.co.uk www.sovereign-omega.co.uk	Supplier:	GB importer:	Sovereign Lubricants (UK) Ltd, Crowtrees Lane,
	<u>Manufacturer:</u>	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	T: 01484 718674 - F: 01484 400164 enquiries@sovereign-omega.co.uk

1.4. Emergency telephone number

Emergency telephone:	Call a Poison Center, emergency number or doctor/physician.
	NHS: 111

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SECTION 2: HAZARDS IDENTIFICATION			
2.1. Classification of the subs	tance or mixture		
<u>CLP:</u>	The product is not classified.		
2.2. Label elements	The substance/mixture does not meet the criteria for classification, but the following labelling must be applied:		
	ContainsReaction mass of 1H-Benzotriazole-1-methanamine, N,N-bis(2- ethylhexyl)-6-methyl- and 2H-Benzotriazole-2-methanamine, N,N-bis(2- ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4-methyl-1H-benzotriazole-1- methylamine and 2H-Benzotriazole-2-methanamine, N,N-May produce an allergic reaction.		
	Safety data sheet available on request.		
<u>2.3. Other hazards</u> <u>PBT/vPvB:</u>	This product does not contain any PBT or vPvB substances.		
<u>Other:</u>	The product contains a small amount of a substance which is harmful to aquatic organisms. 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

No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure. All substances in the product are either registered or exempt from registration under REACH.

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CLP:

<u>%:</u>	CAS-No.:	EC No.:	REACH Reg. No:	Chemical name:	Hazard classification:	<u>Notes:</u>
50-75	64742-65-0	265-169-7	01-2119471299-27	Distillates (petroleum), solvent-dewaxed heavy paraffinic; Baseoil- unspecified	-	L
10-30	64742-62-7	265-166-0	01-2119480472-38	Residual oils (petroleum), solvent-dewaxed; Baseoil- unspecified	-	L
0.1-1	-	939-700-4	01-2119982395-25	Reaction mass of 1H- Benzotriazole-1- methanamine, N,N-bis(2- ethylhexyl)-6-methyl- and 2H-Benzotriazole-2- methanamine, N,N-bis(2- ethylhexyl)-5-methyl- and N,N-bis(2-ethylhexyl)-4- methyl-1H-benzotriazole-1- methylamine and 2H- Benzotriazole-2- methanamine, N,N-	Skin Irrit. 2;H315 Skin Sens. 1;H317 Aquatic Acute 1;H400 Aquatic Chronic 2;H411	
Nataa						

Notes:

L: DMSO < 3% (IP 346)

SECTION 4: FIRST AID N		
4.1. Description of first aid m	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.	
<u>Skin contact:</u>	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.	
<u>Eye contact:</u>	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		
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

<u>Medical attention/treatments:</u> Treat symptomatically.

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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.
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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.

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

precautions:

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

References:

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

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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	ge, including any incompatibilities
Technical measures for safe storage:	No special precautions.
Storage conditions:	Store in tightly closed original container.
7.3. Specific end use(s)	
<u>Specific use(s):</u>	Lubricant.

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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. 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.
Eve protection:	Risk of contact: Wear goggles/face shield.
Skin protection:	Not relevant during normal use.
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>	Black. Grey.
<u>Odour:</u>	Almost odourless.
<u>pH:</u>	Not applicable.
Melting point / freezing point:	>180°C
Boiling point:	Not available.
Flash point:	>240°C
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.
Explosive limits	Not available.
Vapour pressure:	Not relevant.
Vapour density:	Not relevant.
Relative density:	~ 0,9
Solubility:	Soluble in: Oil
Partition coefficient (n- octanol/water):	Not available.
<u>Auto-ignition</u> temperature (°C):	>200°C
Decomposition temperature (°C):	Not available.
<u>Viscosity:</u>	Not available.
Explosive properties:	Non-explosive
Oxidising properties:	Non-oxidising
9.2. Other information	
<u>Other data:</u>	No information available.

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SECTION 10: STABILITY AND REACTIVITY	
10.1. Reactivity	
<u>Reactivity:</u>	Not reactive.
10.2. Chemical stability	
<u>Stability:</u>	Stable under normal temperature conditions.
10.3. Possibility of hazardous	e reactions
Hazardous Reactions:	None known.
10.4. Conditions to avoid	
Conditions to avoid	Heating.
10.5. Incompatible materials	
Incompatible materials:	Strong oxidising substances.
10.6. Hazardous decomposition products	
Hazardous decomposition products:	Carbon oxides

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects			
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.		
<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 frequent contact may cause redness, itching, eczema and skin cracking. The product contains a small amount of sensitising substance which may		
	provoke an allergic reaction among sensitive individuals after repeated contact.		
<u>Eye contact:</u>	Direct contact may irritate.		
Ingestion:	May irritate and cause malaise.		
Specific effects:	The harmful effects may increase in used grease. Prolonged or repeated contact with used grease may cause serious skin diseases, such as dermatitis.		
11.2. Information on other hazards			

Endocrine disruptingThe product does not contain any substance identified as having endocrine
disrupting properties.

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SECTION 12: ECOLOGICAL INFORMATION 12.1. Toxicity Greases are generally hazardous to the environment. Not classified as dangerous to the environment. However, the product should not Ecotoxicity: be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. 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 No data available. Mobility: 12.5. Results of PBT and vPvB assessment PBT/vPvB: This product does not contain any PBT or vPvB substances. 12.6. Endocrine disrupting properties Endocrine disrupting The product does not contain any substance identified as having endocrine disrupting properties. 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: 12 01 12

Dispose of contaminated packings as residue.

Contaminated packaging:

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SECTION 14: TRANSPORT INFORMATION

The product is not regulated as dangerous goods under IMDG Code, IATA-DGR and ADR/RID.

<u>14.1. UN number</u>		
<u>UN-No:</u>	-	
14.2. UN proper shipping nam	ne l	
Proper Shipping Name:	-	
14.3. Transport hazard class(es)	
<u>Class:</u>	-	
14.4. Packing group		
<u>PG:</u>	-	
14.5. Environmental hazards		
Marine pollutant:	-	
Environmentally Hazardous substance:	-	
14.6. Special precautions for user		
Special precautions:	None known.	
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.
	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.

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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.1, 2, 3, 4, 8, 9, 11, 12, 13, 14, 15, 16.

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<u>Abbreviations and acronyms</u> used in the safety data sheet:	CSA= Chemical Safety Assessment. PBT = Persistent, Bioaccumulative and Toxic. vPvB = very Persistent and very Bioaccumulative.	
Additional information:	Classification according to Regulation (EC) No. 1272/2008: Calculation method.	
Wording of H-statements:		
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H400	Very toxic to aquatic life.	
H411	Toxic to aquatic life with long lasting effects.	

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.