648

Omega
The Ultimate Lubricant

DESCRIPTION:

Omega 648 “Smokeless" Hi-Temp Chain Lubricant is a specially formulated high-technology blend of extremely stable, low-evaporation synthetic fluids.

The result of extensive research and on-site testing, Omega 648 has been engineered specifically to meet the ever-increasing demands of modern chain systems exposed to elevated temperatures and high cleanliness production requirements.

PERFORMANCE CHARACTERISTICS:

Omega 648 is a high-quality, high-performance chain lubricant. It features an unsurpassed “stay-in-place” property to ensure consistent, long-lasting, high-adhesion, “wet” lubrication to chains and conveyors subjected to elevated temperatures for extended periods of time. Omega 648 continuously and consistently protects such chains and conveyors with a reliable film of synthetic fluid.

A clear yellow, clean chain lubricant, Omega 648 contains no silicones or solid lubricants. It is non-carbonizing in use at elevated temperatures. Omega 648 will not form hard lacquers or carbon residues that are difficult to remove or, at worst, can build up and block oil-ways to induce rapid and costly wear in the breakdown process.

Omega 648’s “smokeless” fully synthetic formulation also ensures low evaporation loss even when used at elevated temperatures so that the need for continuous lubrication is eliminated.

HIGH-TECHNOLOGY ADDITIVES:

The result of superior research and engineering, Omega 648 contains high-technology additives to ensure extreme-pressure / anti-wear capabilities at elevated temperatures over extended periods of time.

The very stable base fluid and effective additives package of Omega 648 extends the working life of chains and tracks with a protective film that clings tenaciously to applied metal surfaces and remains stubbornly in place.

Omega 648 demonstrates a very low order of toxicity. Its special formulation also provides an extremely high level of corrosion protection.

MAJOR APPLICATIONS:

Omega 648 “Smokeless” Hi-Temp Chain Lubricant is especially suited for applications that require a clean production environment, such as dying and finishing in the textile industry and paint work curing in the automotive and electronics industry.

Omega 648 has been developed for use on various types of chains, including tenter frames, kiln chains, food baking oven chains and metal heat treatment oven chains.

Omega 648 is also ideal for use in high-temperature tunnels, dryers, shrink wrap machines, textile auxiliaries, steel, plastic, printing and woodworking processes.

METHODS OF APPLICATION:

Omega 648 can be applied by brush, drip, oil can or automatic lubricator.

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT
ISO Viscosity Grade	D-2422	150
Appearance	Visual	Clear Yellow
Density, Kg/L @ 15°C	D-1298	0.975
Viscosity, cSt @ 40°C	D-445	151
Viscosity, cSt @ 100°C	D-445	17
Viscosity Index	D-2270	120
Flash Point, COC, °C	D-92	>300
Pour Point, °C	D-97	-32
Evaporation Loss, % wt. (6.5 hrs@204°C)	D-972	1.2
Rust Test		
Distilled Water, 48 hrs.	D-665-A	Pass
Salt Water, 48 hrs.	D-665-B	Pass

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

SAFETY DATA SHEET

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

1.1. Product identifier

Product name: Omega 648

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

Application: Lubricant.

1.3. Details of the supplier of the safety data sheet

Supplier: GB 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
magna@magnagroup.com
www.magnagroup.com

Further information can be obtained from: magna@magnagroup.com

1.4. Emergency telephone number

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

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP: The product is not classified.

2.2. Label elements

2.3. Other hazards

PBT/vPvB: This product does not contain any PBT or vPvB substances.

Other: The product contains a small amount of a substance which is harmful to aquatic organisms.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

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

CLP:

%:	CAS-No.:	EC No.:	REACH Reg. No:	Chemical name:	Hazard classification:	Notes:
85-95	68515-58-2	271-100-1	-	1,2,4-Benzenetricarboxylic acid, mixed branched and linear heptyl and nonyl and undecyl esters	Not Determined	
0-10	9003-27-4		-	Polyisobutene	Aquatic Chronic 4;H413	
0-<3	68411-46-1	270-128-1	-	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Repr. 2;H361f Aquatic Chronic 3;H412	

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 or after inhalation of oil mist: Seek medical attention and bring along 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

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.

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

Cool containers/tanks with water spray. Do not allow run-off from fire fighting to enter drains and water courses.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid inhalation of oil mist and 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 in vermiculite, dry sand or earth and place into containers.

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 oil, particularly used oil. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.
Technical measures:	Use work methods which minimise oil mist production.
Technical precautions:	When working with heated oil, 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. Protect from heat and direct sunlight.

7.3. Specific end use(s)

Specific use(s):	Lubricant.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No occupational exposure limit assigned.

8.2. Exposure controls

Engineering measures:	Provide adequate ventilation and minimise the risk of inhalation of vapours and oil mist.
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 or risk of inhalation of oil mist, suitable respiratory equipment with combination filter (type A2/P3) can be used.
Hand protection:	Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. 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 apron or protective clothing in case of splashes.
Hygiene measures:	Wash hands after contact. Wash contaminated clothing before reuse.
Environmental Exposure Controls:	Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Form:	Liquid.
Colour:	Yellow.
Odour:	Mild.
Odour threshold:	Not available.
pH:	Not available.
Melting point / freezing point:	Not available.
Boiling point:	Not available.
Flash point:	>220 °C
Evaporation rate:	Not available.
Flammability (solid, gas):	Not relevant.
Explosive limits	Not available.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative density:	0,95
Solubility:	Not available.
Partition coefficient (n-octanol/water):	Not available.
Auto-ignition temperature (°C):	Not available.
Decomposition temperature (°C):	Not available.
Viscosity:	150 ㎟/s (40°C)
Explosive properties:	Not available.
Oxidising properties:	Not available.

9.2. Other information

Other data:	Not available.

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: Hazardous polymerisation will not occur.

10.4. Conditions to avoid

Conditions to avoid: Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Incompatible materials: Strong oxidizing agents. Combustible materials.

10.6. Hazardous decomposition products

Hazardous decomposition products: Carbon oxides (CO, CO2)

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.
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.

Eye contact:	Splashes may irritate.
Ingestion:	May irritate and cause malaise.
Toxicological data:	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene LD50 (oral, rat): > 5000 mg/kg LD50 (dermal, rat) > 2000 mg/kg.

11.2. Information on other hazards

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

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity: There are no data on the ecotoxicity of this product.

12.2. Persistence and degradability

Degradability: There are no data on the degradability of this product.

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: This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

Endocrine disrupting properties: 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 from residues: EWC-code: 13 02 06

Contaminated packaging: Dispose of contaminated packings as residue.

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

PG: -

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.

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: 2, 3, 9, 10, 11, 12, 16.

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Abbreviations and acronyms used in the safety data sheet:	CSA= Chemical Safety Assessment. LD50 = Lethal Dose 50%. 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:

H361f	Suspected of damaging fertility.
H412	Harmful to aquatic life with long lasting effects.
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.

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