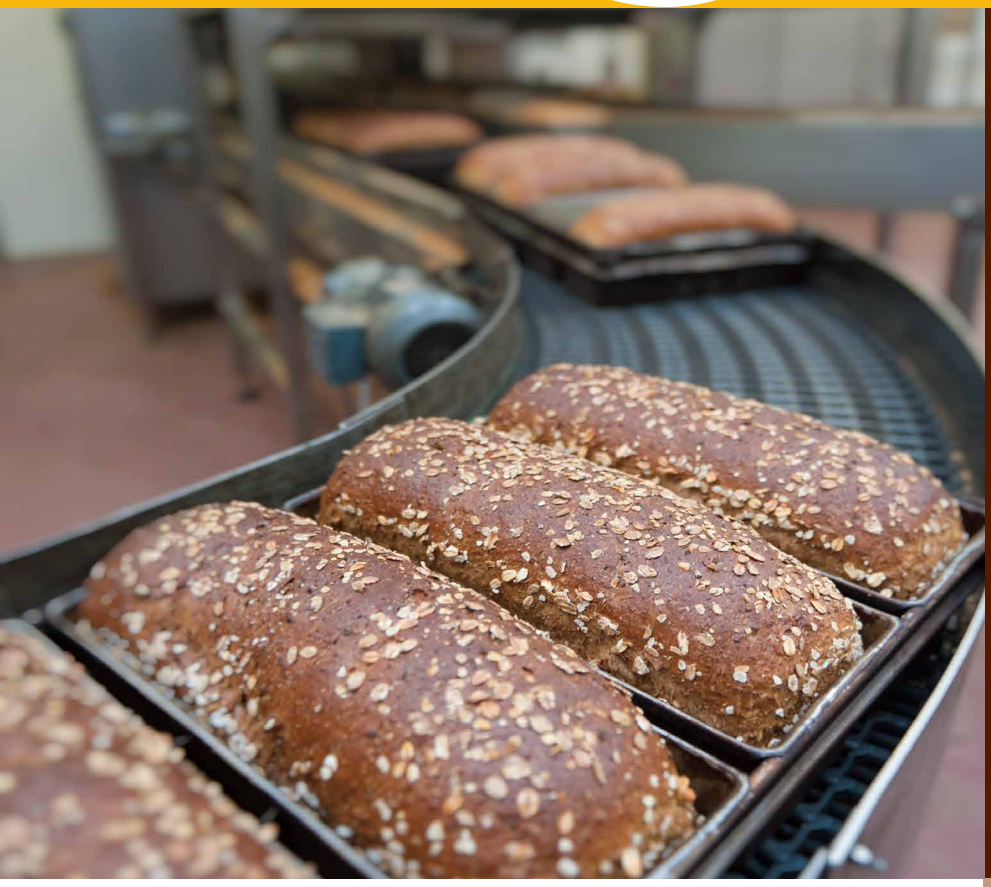
Ωmega®
The Ultimate Lubricant

642

OMEGA 642 Synthetic FG HAL Hi-Temp Chain Oil



Synthetic FG HAL Hi-Temp Chain Oil

- *Formulated with premium synthetic base fluid & additive package quality designed for high performance at elevated temperatures*
- *NSF H1-registered + HALAL & KOSHER quality certified*
- *Excellent anti-wear & anti-corrosion properties*
- *Extends lubrication interval and chain life*
- *Available in ISO VG 68 & 220*

TRUST *Save Money*
OMEGA *Enhance Performance*
TO *Extend Service Life*

NSF®
Nonfood Compounds Program Listed
Category Code :
Registration Number :

ITW PERFORMANCE POLYMERS & FLUIDS®
KOREA

SPECIAL FEATURES

OMEGA 642 Synthetic FG HAL Hi-Temp Chain Oil is formulated with synthetic base fluid and a package of quality additives to offer reliable protection and lubrication to chain systems of machineries frequently exposed to elevated temperatures in virtually all food & beverage and pharmaceutical plants.

- **Omega 642** offers inherently exceptional oxidative & thermal stability, eliminating the risk of carbon or lacquer formation and maintaining cleanliness of the chain systems frequently exposed to elevated temperatures.
- **Omega 642** offers outstanding shear stability, protecting and lubricating effectively chain systems under fluctuating pressure and temperatures.
- **Omega 642** is NSF H1-registered and meets the HALAL and KOSHER quality standards.

OUTSTANDING PROPERTIES

OMEGA 642 Synthetic FG HAL Hi-Temp Chain Oil is quality engineered to outperform and outlast most conventional food grade chain oil.

- **Omega 642** repels water effectively, minimizing the risk of water contamination and thus prolonging the re-lubrication interval.
- **Omega 642** is fortified with corrosion inhibitor to offer extra protection to chains operating under the corrosive ambient environment.
- **Omega 642** offers excellent lubricity and load-carrying capability to protect chain systems from frictional wear due to internal metal-to-metal contact, lowering the risk of chain elongation and ultimately extending the chain life.

USE FOR

Omega 642 lubricates and protects chain units of processing machineries frequently operating at elevated temperatures.

- Use **Omega 642** for oven chains, transport chains, hoisting chains, chain drives, etc. in the food & beverage and pharmaceutical industries.
- **Omega 642** is suitable for use in food processing plants demanding HALAL and KOSHER certified chain oil.
- **Omega 642** is available in ISO VG 68 & 220 for chain units exposed to various operating conditions.

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The information contained in this publication is to the best of our knowledge and accurate at the time of issue in December, 2016

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Omega
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Nonfood Compounds
Category Code : H1
Registration Number : 154443

DESCRIPTION:

Omega 642 Synthetic FG HAL Hi-Temp Chain Oil is a Halal-certified, synthetic food grade lubricant designed for chain systems frequently exposed to high-temperatures. It is formulated with a low-evaporation, shear & thermal-stable synthetic base fluid and the latest additive technology offering outstanding load-carrying & friction point wetting properties highly required in chain lubrication. Omega 642 meets and exceeds clean and efficient chain lubrication demanded by the maintenance professionals in the food & beverage and pharmaceutical industries.

NSF H1 LISTED & HALAL CERTIFIED:

Omega 642 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 642 is also manufactured in accordance with the strict Halal and Kosher quality standards. A designated production line/area is used to manufacture Omega 642. This special oil production line/area is completely segregated to avoid cross-contamination caused by any prohibited materials according to the requirements of these quality standards.

SYNTHETIC FORMULATION FOR HIGH-TEMPERATURE APPLICATION:

Omega 642 is a synthetic, high-quality chain lubricant which offers outstanding thermal and oxidation stability. It features an unsurpassed “stay-in-place” property to ensure consistent, long-lasting, “wet” lubrication to chains and conveyors subjected to elevated temperatures for extended periods of time. Omega 642 continuously and consistently protects chains and conveyors with a tenacious film of synthetic fluid.

Omega 642 is non-carbonizing in use at elevated temperatures. Omega 642 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 642’s synthetic formulation also ensures low evaporation loss even when used at elevated temperatures, resulting in reduced oil consumption and ultimately extended re- lubrication cycle.

Omega 642 offers the maintenance professionals a clean and reliable solution to ever- demanding chain protection and lubrication at elevated temperatures up to 250°C.

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EXCELLENT PERFORMANCE:

Formulated with shear-stable synthetic fluid and an advanced package of proprietary additives, Omega 642:

- Withstands shear force and maintains its designed viscosity in a wide range of service temperatures, lowering the risk of premature lubricant deterioration and excessive oil consumption and ultimately reducing maintenance costs.
- Offers exceptional lubricity and film strength to protect the chain components against wear and friction, prolonging the risk of premature chain failure.
- Repels water to lower the risk of deterioration of lubricant caused by water contamination, maintaining high cleanliness production requirements and prolonging the re-lubrication intervals.
- Is reinforced with anti-wear and load-carrying additives and corrosion inhibitor to offer multi-protection to the chain units, lowering the risk of unexpected machine breakdown.

KEY APPLICATIONS:

Being NSF H1-listed for incident food contact and Halal quality certified, Omega 642 is recommended for use in protecting and lubricating chain units of processing machineries subjected to elevated temperatures in virtually all food & beverage and pharmaceutical plants. It can be use in transport chains, oven chains, chain drives, hoisting chains, etc.

Note: Omega 642 is not recommended to be used, when in contact with: ABS, Acrylic Paint, Low Nitrile Buna-N (<36%), Neoprene, Polystyrene, PVC and SBR Rubber.

In case of doubt, consult our Technical Services Department since specific testing at operating conditions may be required.

TYPICAL DATA:

TEST	ASTM TEST METHOD	TEST RESULT	
		ISO VG68	ISO VG220
Appearance	--	Clear, Yellow	
Density, kg/L @ 15°C	D-1298	0.947	0.953
Viscosity, cSt @ 40°C	D-445	67	216
Viscosity, cSt @ 100°C	D-445	8.5	26.3
Viscosity Index	D-2270	96	153
Flash Point, COC, °C	D-92	264	252
Pour Point °C	D-97	-30	-36
Copper Corrosion	D-130	1a	1a
Steel Corrosion	D-665B	Pass	Pass
Four Ball Wear, Scar Diameter (mm)	D-4172	--	0.36
Recommended Operating Temperature Range, °C	--	-15 to 240	-20 to 250

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

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