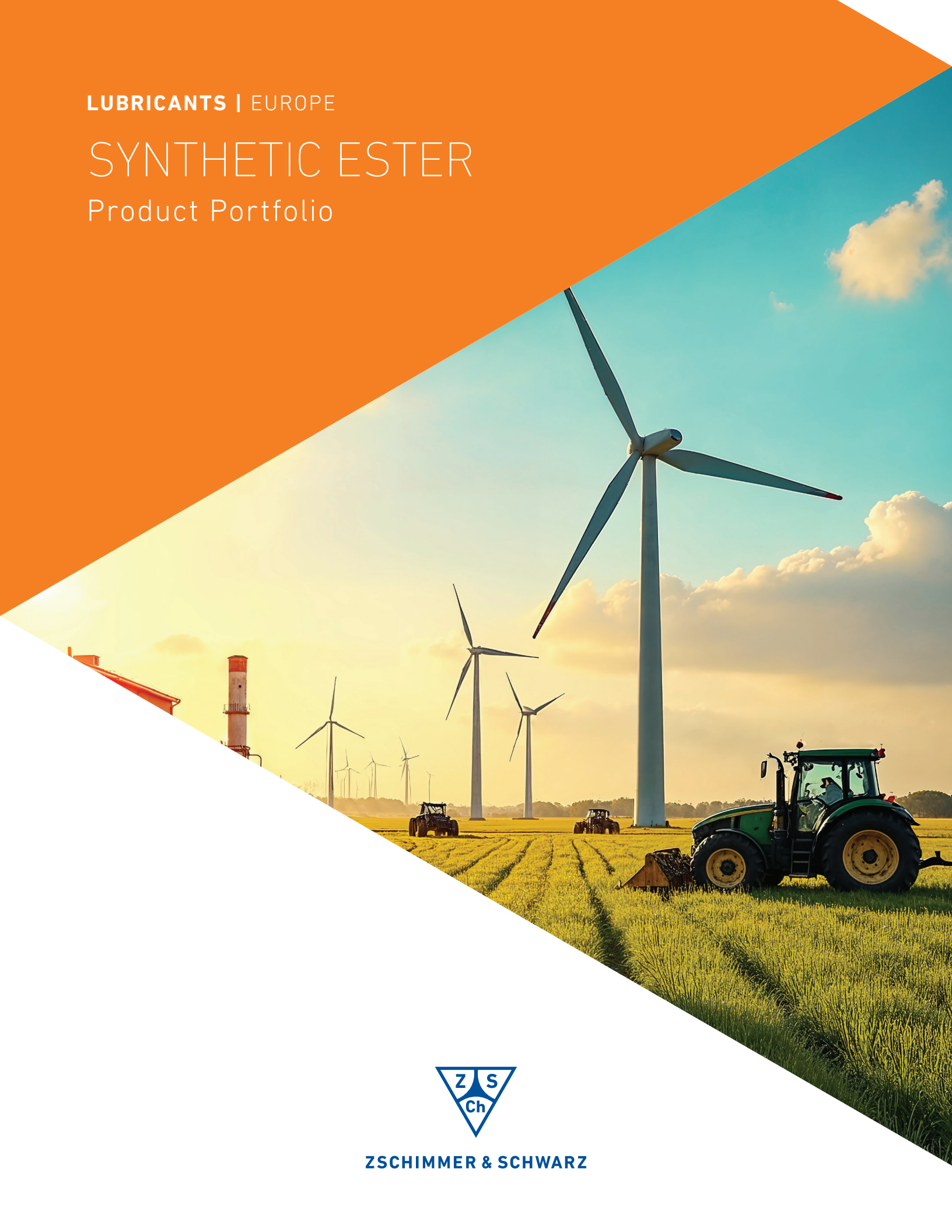


LUBRICANTS | EUROPE

SYNTHETIC ESTER

Product Portfolio



ZSCHIMMER & SCHWARZ

PRODUCT LINE AND SERVICES

The Lubricants Division of Zschimmer & Schwarz manufactures base stocks, additives and private-label lubricants that ensure the safe and efficient operation of equipment and industrial processes. We offer a wide range of synthetic esters that can be selected to meet the demanding requirements of industrial, automotive, marine and dielectric applications.

PRODUCTS

- ▶ ESTERTEC® (VSP esters)
- ▶ LEXOLUBE® (specialty synthetic esters)
- ▶ LUBRICIT® (high-performance esters)
- ▶ MULSIFAN (non-ionic surfactants)
- ▶ PHOSPHETAL (EP/AW/surfactants)
- ▶ CUBLEN (EP/AW/chelating agents)
- ▶ PURTON (corrosion inhibitors)

CHEMISTRY

- ▶ Monoesters, diesters
- ▶ Polyol esters, complex esters, polymeric esters
- ▶ Aromatic esters
- ▶ Glyceryl esters, sorbitan esters
- ▶ Phosphate esters, phosphonates
- ▶ PEG/PPG esters
- ▶ Carboxamides

When challenging operating environments require a lubricant that is eco-friendly, food-safe, fire-resistant or bio-derived, we deliver high-performance components and formulated fluids. The division also produces a variety of specialty additives that reduce friction, prevent corrosion and emulsify components in water-based metalworking fluids.

FUNCTIONALITY

- ▶ Eco-friendly, biogenic, biodegradable base stocks
- ▶ Polarity for deposit prevention and seal conditioning
- ▶ Lubricity, antiwear, friction reduction, energy efficiency
- ▶ Dielectric insulation and heat transfer
- ▶ Surfactants, nonionic and anionic emulsifiers
- ▶ Corrosion inhibition
- ▶ Chelating agents, emulsion stabilizers

APPLICATIONS

- ▶ **Industrial lubricants:** gear/chain, hydraulic, compressor
- ▶ **Metalworking:** forming, cutting, grinding, polishing
- ▶ **Agriculture/forestry:** tractor hydraulic, gear, grease
- ▶ **Driveline:** PCMO, HDDEO, ATF, MTF, AGO, grease
- ▶ **Marine:** stern tube, bearings, wire ropes
- ▶ **NSF food grade:** Kosher, Halal applications
- ▶ **Dielectric fluids:** transformer oil, immersion cooling, EVs



lexolube
synthetic esters

For further information, please visit [zslubes.com](https://www.zslubes.com)
ESTERTEC®, LEXOLUBE® and LUBRICIT® are tradenames
of companies of the Zschimmer & Schwarz Group.

EsterTec
synthetic esters

Product Name	High Temperature	Low Temperature	Food Grade	Biodegradable	Metal-Working	Gears & Chains	Greases	Compressor	Engine/Driveline	Textile/Fibers	Viscosity @ 40C	Viscosity @ 100C	Viscosity Index	Pour Point °C	Flash Point °C
Fatty Acid Esters															
LUBRICIT iC9-9	No	Yes	No	Readily	MW		GR				5.2	1.8	n/a	-25	185
LUBRICIT 2-EHL	No	Yes	No	Readily	MW		GR				5.2	1.8	n/a	-25	185
LUBRICIT 2-EHC	No	No	No	Readily	MW		GR				5.7	2.0	150	-25	180
LUBRICIT NBS	No	No	No	Readily	MW					TF	6.4	2.2	195	20	195
LUBRICIT 2-EHO	No	Yes	No	Readily	MW		GR				8.2	2.7	190	-40	220
LUBRICIT 2-EHP	No	No	No	Readily	MW						8.5	2.7	176	0	215
LEXOLUBE HS-C	No	No	No	Readily	MW		GR				9.0	3.0	220	-5	195
LUBRICIT 2-EHS	No	No	No	Readily	MW					TF	9.6	2.9	175	5	220
LEXOLUBE B-109	No	No	No	Readily	MW						16.5	4.2	165	0	240
Diesters															
LUBRICIT DOA	No	Yes	No	Readily	MW		GR	CO	ED		7.6	2.3	120	-50	215
LUBRICIT DIDA	No	Yes	No	Readily	MW		GR	CO	ED		14	3.6	145	-60	230
LUBRICIT DTDA	No	Yes	No	Readily	MW		GR	CO	ED		23	4.9	145	-55	245
LUBRICIT DTDA/1	No	Yes	No	Readily	MW		GR	CO	ED		27	5.4	135	-60	250
LUBRICIT 2-EHD/1	Yes	Yes	No	Readily	MW	GC	GR	CO	ED		93	13	140	-40	310
Polyol Esters															
LUBRICIT TMP C9	No	Yes	Yes	Readily	MW	GC	GR	CO	ED	TF	21	4.6	140	-50	275
LUBRICIT PE 4810	No	Yes	No	Readily		GC		CO	ED		32	6.1	145	-5	300
LUBRICIT TMP C18	No	Yes	No	Readily	MW	GC			ED		46	9.4	190	-40	325
LEXOLUBE POE-68HT	Yes	No	No	Non		GC	GR	CO			68	10.4	130	-40	300
LEXOLUBE PQ-68	Yes	Yes	No	Readily		GC	GR	CO	ED		68	8.6	100	-30	250
LEXOLUBE POE-100HT	Yes	Yes	No	Non		GC	GR				100	12.4	120	-35	300
LUBRICIT PEiC18	Yes	Yes	No	Readily		GC	GR				145	18	140	-30	320
LEXOLUBE 4PM-114	Yes	Yes	No	Non		GC	GR	CO			170	16	90	-30	275
LEXOLUBE 6NQ-617	Yes	Yes	No	Inherently		GC	GR	CO	ED		220	20	105	-25	300
LEXOLUBE POE-220HT	Yes	Yes	No	Non		GC	GR				220	19	100	-25	300
LEXOLUBE POE-350HT	Yes	No	No	Non		GC	GR				350	25	90	-15	300
LUBRICIT SMO-VEG	n/a	n/a	No	Readily	MW						404	24	75	0	270
Complex Esters															
LUBRICIT 9538	Yes	No	No	Readily	MW	GC	GR				140	22	180	-20	290
LUBRICIT 9526	Yes	Yes	Yes	Readily	MW	GC	GR	CO	ED		330	45	185	-40	320
LEXOLUBE KL-435	Yes	No	No	Readily	MW	GC	GR				435	38	125	-30	320
LUBRICIT 9567	Yes	No	Yes	Readily							3000	260	230	-30	310
Food Grade Esters															
LEXOLUBE FG-8 HX1	No	Yes	Yes	Readily		GC					7.6	2.3	120	-50	215
LEXOLUBE FG-12 HX1	No	Yes	Yes	Readily		GC					12	3.3	165	-55	240
LEXOLUBE FG-15 HX1	No	No	Yes	Readily	MW						15	4.0	135	-15	235
LEXOLUBE FG-46 HX1	Yes	Yes	Yes	Inherently		GC	GR	CO			46	7.4	135	-45	270
LEXOLUBE FG-68 HX1	Yes	Yes	Yes	Non		GC	GR	CO			68	10	130	-40	300
LEXOLUBE FG-100 HX1	Yes	Yes	Yes	Non		GC	GR	CO			100	12	120	-35	300
LEXOLUBE FG-220 HX1	Yes	Yes	Yes	Non		GC	GR	CO			220	19	100	-25	300
LEXOLUBE FG-350 HX1	Yes	No	Yes	Non		GC	GR	CO			350	25	90	-15	300



SERVICES

Application technology support

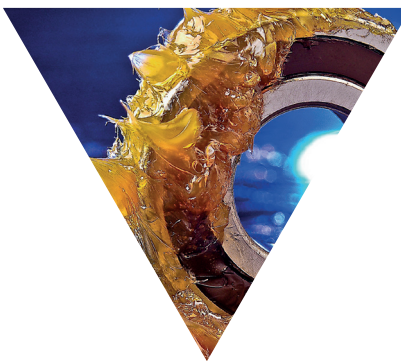
- ▶ Tribology studies:
friction, wear, extreme pressure, tapping torque
- ▶ Stability measurements:
oxidative, thermal, hydrolytic, volatility
- ▶ Performance properties:
foam, demulsibility, corrosion, filterability
- ▶ Physical properties:
viscosity, flash/fire/pour points

Registrations

- ▶ NSF H1/HX-1
- ▶ Factory Mutual fire resistance
- ▶ EU Ecolabel/LuSC/VGP/VIDA
- ▶ IEC electrotechnical compliance
- ▶ Kosher – Halal
- ▶ USDA BioPreferred®

Fluid formulation

- ▶ Specialty performance levels
- ▶ Private-label products





ZSCHIMMER & SCHWARZ

Chemistry tailor-made

► AMERICAS

Zschimmer & Schwarz, Inc.

70 GA Highway 22 W
Milledgeville, GA 31061 | US
T +1 478 454 1942
lubricants@zschimmer-schwarz.com

Zschimmer & Schwarz

do Brasil Ltda.
Estrada Geral Morro do Paula 546
Distrito Industrial – Bairro São Borja
93032-530 São Leopoldo RS | BR
T +55 51 3566 1666
zsb@zschimmer-schwarz.com.br

zslubes.com
zschimmer-schwarz.com

► EUROPE

Zschimmer & Schwarz

Italiana S.p.A.
Via Angelo Ariotto, 1/C
13038 Tricerro (VC) | IT
T +39 0161 808 111
info.zsi@zschimmer-schwarz.com

Zschimmer & Schwarz

España, S.L.U.
Ctra. CV-20, km. 3,200. Apdo. 118
12540 Vila-real (CS) | ES
T +34 964 626 365
info.zse@zschimmer-schwarz.com

Zschimmer & Schwarz

GmbH & Co KG Chemische Fabriken
Max-Schwarz-Strasse 3–5
56112 Lahnstein | DE
T +49 2621 12-0
info@zschimmer-schwarz.com

► ASIA

Zschimmer & Schwarz

Chemical (China) Co., Ltd.
No. 16, Kaiyuan Road
Datang Industrial Park
Sanshui, 528143 Foshan, Guangdong | CN
T +86 757 87 27 06 01
zsc@zschimmer-schwarz.cn



For further information,
please visit **estertec.com**.