



products from renewable sources

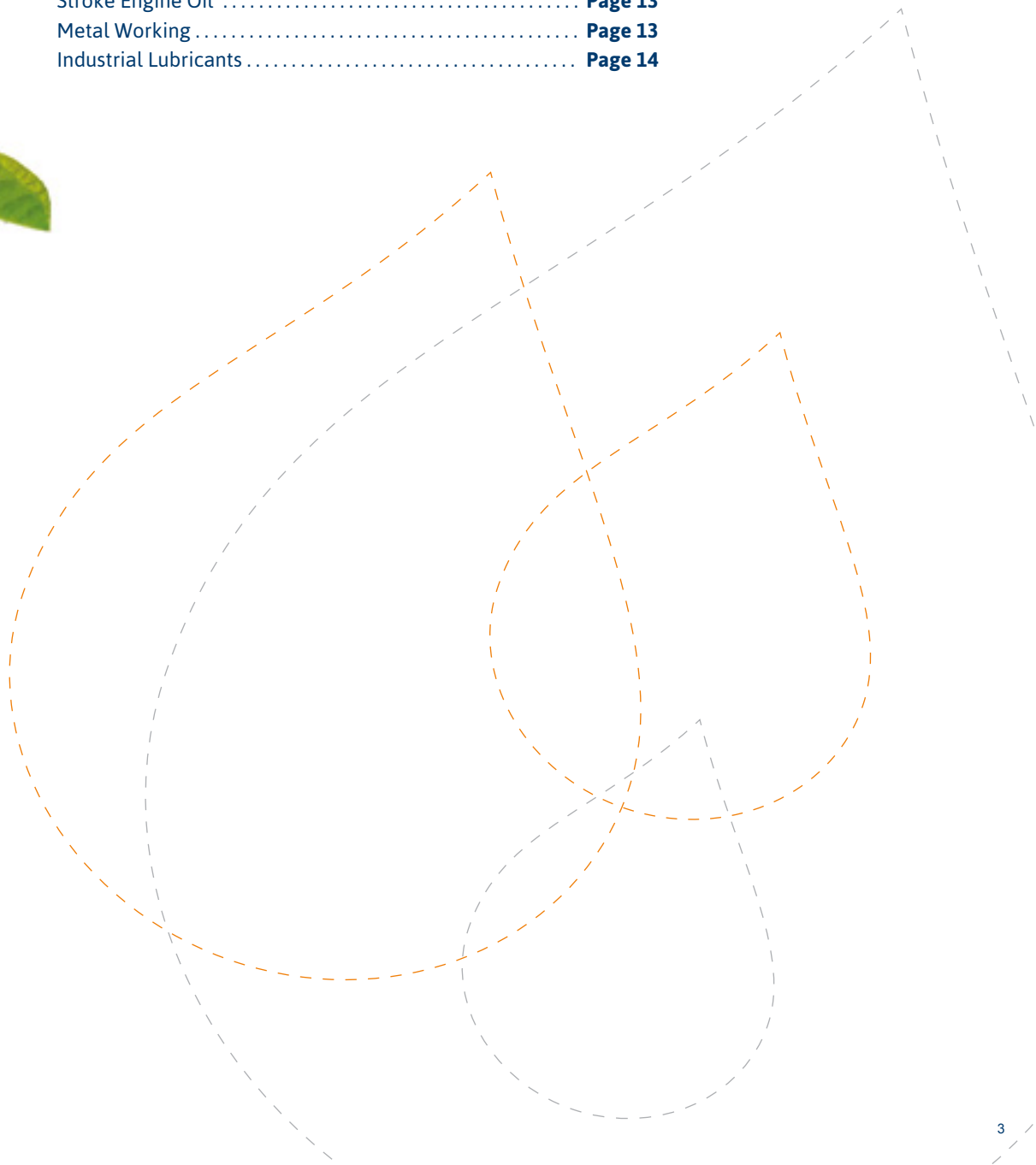


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ESTERIFYING is our attitude



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Enhancing your **Natural Portfolio**

Shared Expertise

Temix Oleo was formed in October 2014 by the merger of Oleochimica Italia Srl (previously Undesa Italia) and Temix International. Given its roots, the new company is based in strong historical traditions and values, while offering extensive expertise in the respective industries of its predecessors: detergents and cosmetics (Temix International), and lubricants, rubber and other industrial application products (Oleochimica Italia). Temix Oleo combines its experience in the distribution of raw materials, selected mainly from renewable sources, together with the technology and experience of Oleochimica Italia in ester and fatty acid production.

Real Sustainability

Now a well-known resource for specialty oleochemical esters, Temix Oleo focuses on sustainable chemistry, promoting the use of selected renewable and biodegradable raw materials. Even internally, Temix Oleo promotes eco-compatible business management practices, encouraging its team to continually seek innovative, sustainable and qualitative solutions.

R&D/Green Chemistry

With an ever-changing market, the ability to innovate is paramount. Temix Oleo continually invests in technological innovation, particularly through its research and development (R&D) efforts. As the company develops new products, it embraces the principles of green chemistry.

Customized Products

Temix Oleo has the ability to develop tailor-made products designed to meet each customer's unique needs. For more information on the technical details of this process, our sales office in Italy or our U.S. distributor would be happy to help you.

Our product range
**is based on a variety of raw materials,
including:**

Ethylhexyl Alcohol

Isodecyl/n-Decyl Alcohol

Isotridecyl/Tridecyl Alcohol

Neopentylglycol

Glycerol

Trimethyl Propanol Alcohol

Pentaerythritol Alcohol

PEG

Phthalic Anhydride

Trimellitic Anhydride

Caprylic Acid

Pelargonic Acid

Capric Acid

Caprylic/Capric Acid

Lauric Acid

Coconut Acid

Palmitic Acid

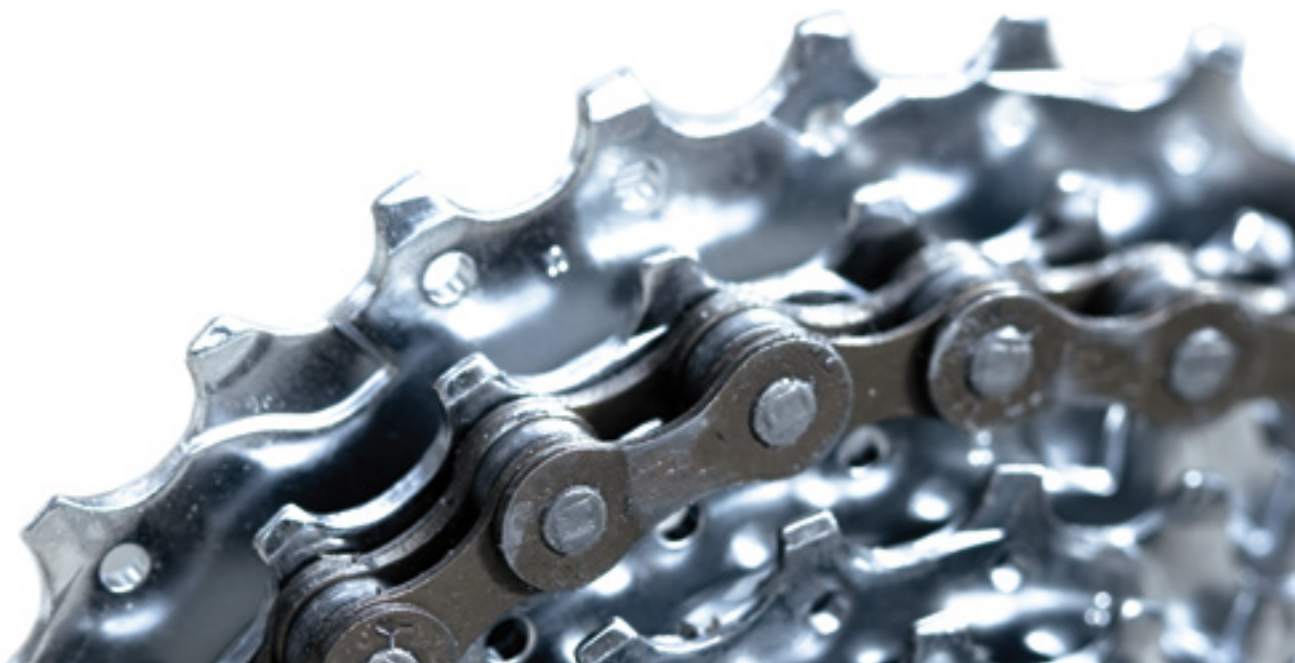
Stearic Acid

Oleic Acid

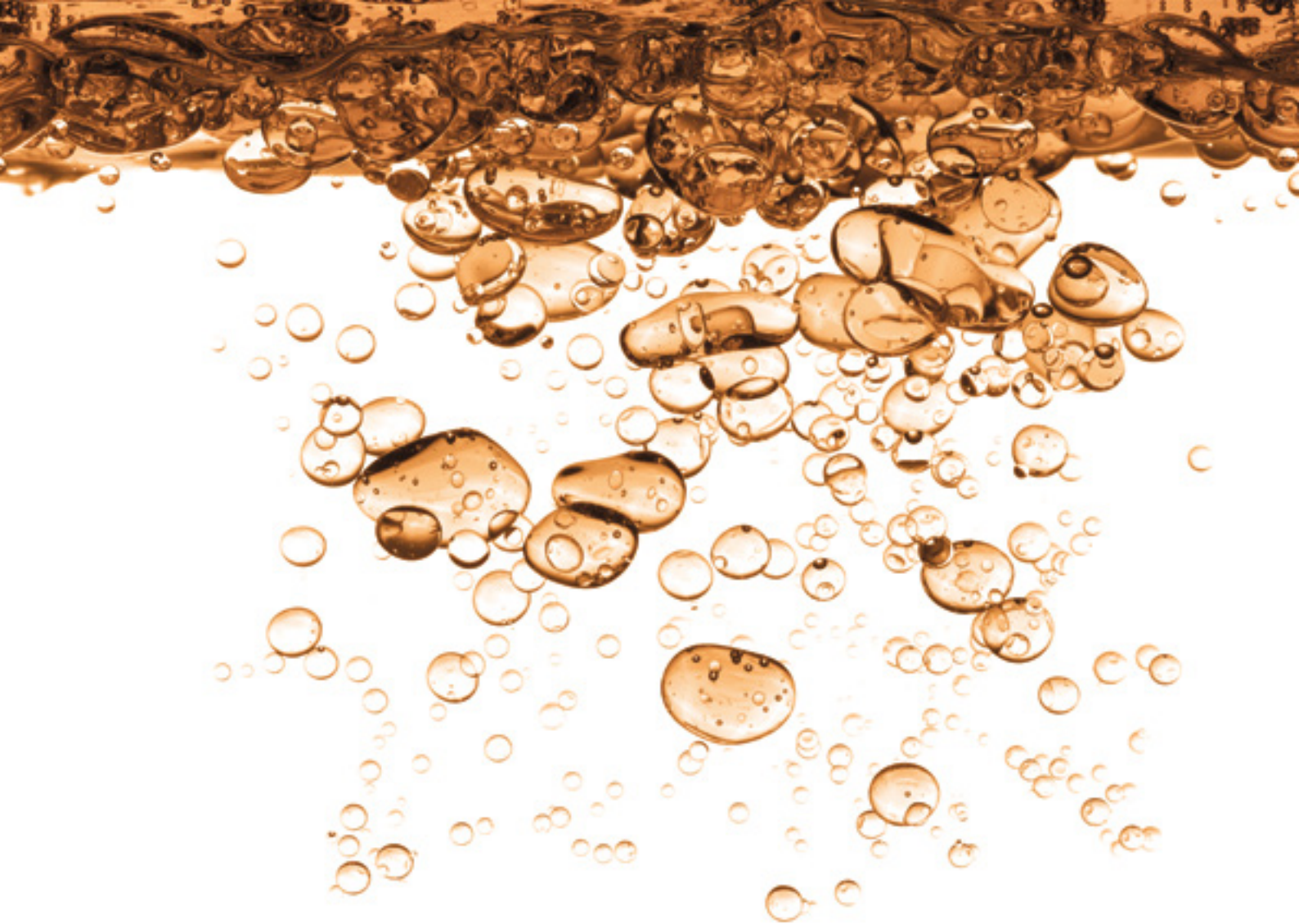
Adipic Acid

Azelaic Acid

Sebacic Acid







Esters for Lubricants

Temix Oleo produces highly biodegradable esters derived mainly from fatty acids and renewable raw materials. Most of these products retain certain qualities of their raw materials (natural fats and oils), making them non-toxic and non-irritating. The number of potential fatty esters and combinations of functions they can offer is countless. Temix Oleo is adept at satisfying the needs of our customers in a variety of these applications, particularly in lubricants.

Lubricants play a key role in our everyday life, and their functions include to:

- Minimize metal-to-metal contact of moving parts
- Reduce friction and associated heat generation
- Maintain component cleanliness
- Enhance additive solubility and functionality
- Improve power transmission/energy efficiency

Due to the high variety in their structure, different esters are used for different purposes:

Mono Esters are seldom used as pure lubricants, but rather as solvents or dispersants.

Di-Esters are an important class of materials often used alone or in combination with mineral oils (Group II+ or Group III), PAO or other synthetics to enhance additive solubility and elastomer compatibility, to improve detergency or for anti-wear and friction reduction performance.

Poly-Esters are the largest group of esters. They include esters with good biodegradability, along with esters used to reduce friction in tribological applications.

Mono Esters

Methyl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest A20	1.5	-20	84	30 (APHA)	0.3
Temest A6055	6.1	5	130	30 (APHA)	67
Temest A85	5	-15	180	3 (Gardner)	90

Isopropyl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest C65	5	-15	240	3 (Gardner)	80
Temest C40	4	-10	120	50 (APHA)	2

Butyl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest D60	7	20	180	100 (APHA)	1
Temest D65	6	-12	160	2 (Gardner)	80
Temest E65	6	-12	160	2 (Gardner)	80
Temest E60	6	18	160	1 (Gardner)	1
Temest E05	15	-20	136	1 (Gardner)	1

Isotridecyl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest M40	10	-20	>240	60 (APHA)	1
Temest M60	16	0	>240	80 (APHA)	2
Temest M65	16	-25	>240	6 (Gardner)	60

Ethylhexyl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest 2EHC	6	-20	210	100 (APHA)	17
Temest 2EHS	9	4	220	30 (APHA)	2
Temest 2EHP	8.5	-2	190	20 (APHA)	1
Temest 2EHL	5	-15	210	20 (APHA)	1
Temest J60	9	-5	190	4 (Gardner)	30
Temest J65	8.5	-20	240	0.5 (ASTM)	60
Temest J65A	8.5	-20	240	0.5 (ASTM)	60
Temest J65D	8.5	-20	240	250 (APHA)	60
Temest J65S	8.5	-30	240	0.5 (ASTM)	60
Temest J70	8	-10	240	1 (Gardner)	38
Temest J100	84	-50	260	50 (APHA)	0.5
Temest J200	100	-45	290	8 (Gardner)	60

PEG Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest S65	46	0	310	4 (Gardner)	55
Temest S66	52	-5	>220	5 (Gardner)	55
Temest R66	34	5	>220	3 (Gardner)	55

Sorbitan Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest Q65	1000	0	280	8 (Gardner)	75



Di-Esters

Neopentylglycol Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest F65	24	-25	270	3 (Gardner)	85

Adipates

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest L05	15	-55	216	20 (APHA)	0
Temest M05	27	-45	230	50 (APHA)	0
Temest J05	8	-60	207	20 (APHA)	0

The series Glylub® is a trademark of Condensia Quimica SA

Phthalates

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Glylub® 29	39	-48	231	20 (APHA)	0
Glylub® 39	85	-42	254	50 (APHA)	0

Sebacates

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Glylub® 24	21	-71	250	80 (APHA)	0
Glylub® 34	34	-47	234	80 (APHA)	0
Temest J30	11.5	-57	218	70 (APHA)	0

Poly-Esters

Glycerol Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest N65	36	-3	280	4 (Gardner)	90
Temest N65S	36	-8	280	4 (Gardner)	90
Temest N65SA	36	-8	280	4 (Gardner)	90
Temest GMO	75	15	180	4 (Gardner)	70
Temest N85	80	0	240	6 (Gardner)	100
Temest 810	15	-5	240	20 (APHA)	0.3

The series Glylub® is a trademark of Condensia Quimica SA

Glylub® Series (Trimellitates)

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Glylub® 13	54	-45	218	80 (APHA)	0
Glylub® 23	140	-28	280	80 (APHA)	0
Glylub® 33	300	-13	250	70 (APHA)	0
Temest J100	9.5	-30	259	85 (APHA)	0

TMP

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest H35	20.5	-48	255	100 (APHA)	1
Temest H65	46	-20	300	0.8 (ASTM)	85
Temest H65A	46	-20	300	0.8 (ASTM)	85
Temest H65S	46	-42	300	0.8 (ASTM)	90
Temest H65SA	46	-20	300	0.8 (ASTM)	90
Temest H65V	46	-12	300	0.8 (ASTM)	78
Temest H65SLL	46	-42	300	0.8 (ASTM)	88
Temest H65SV	46	-42	300	0.8 (ASTM)	88
Temest H6505A	64	-20	300	0.8 (ASTM)	85
Temest H6505S	64	-33	300	0.8 (ASTM)	88
Temest H6505SA	64	-33	300	0.8 (ASTM)	88
Temest H6505	64	-20	300	0.8 (ASTM)	85
Temest HJ65	32	-20	260	0.8 (ASTM)	82
Temest HJ65A	32	-20	260	0.8 (ASTM)	82
Temest HJ65S	32	-30	260	0.8 (ASTM)	85
Temest H45	40	-6	300	100 (APHA)	10

Pentaerythryl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest G66	100	-15	270	1 (ASTM)	75
Temest G65	60	-20	290	1 (ASTM)	85
Temest G6505	110	-20	300	3 (ASTM)	85
Temest G6506	450	-5	290	3 (ASTM)	85
Temest GG6506	350	-5	290	3 (ASTM)	85
Temest G25	30	-25	290	1 (ASTM)	1



Special Esters

Our Pelargonic Esters are formulated from 100% vegetable and renewable sources.



Pelargonic Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest F35	8.5	-36	218	100 (APHA)	1
Temest J35	10.5	-59	210	100 (APHA)	1
Temest H35M	17	-65	212	100 (APHA)	1
Temest H35	20.5	-48	241	100 (APHA)	1
Temest G35M	26	-36	245	100 (APHA)	1
Temest H4535	40	-20	275	100 (APHA)	1
Temest H3505	350	-51	232	100 (APHA)	1

Saturated Esters

Isotridecyl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest M40	10	-20	230	60 (APHA)	1
Temest M60	16	0	230	80 (APHA)	2
Temest M05	27	-45	230	50 (APHA)	0

Ethylhexyl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest 2EHC	6	-20	210	100 (APHA)	17
Temest 2EHP	8.5	-2	190	20 (APHA)	1
Temest 2EHL	5	-15	210	20 (APHA)	1

Pentaerythritl Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest G25	30	-25	290	1 (ASTN)	1

TMP

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest H35	20.5	-48	255	100 (APHA)	1
Temest H45	40	-6	300	100 (APHA)	10
Temest H4535	40	-20	275	100 (APHA)	1

Saturated Complex Esters

Product	Kinematic Viscosity @ 40°C (cSt)	Pour Point (°C)	Flash Point (°C)	Color	Iodine Value (gI2/100g)
Temest MH05	46	-30	260	80 (APHA)	1
Temest MH06	68	-25	260	0.5 (ASTM)	1
Temest MH07	100	-20	260	0.5 (ASTM)	1
Temest MH08	450	-20	260	0.5 (ASTM)	1
Temest U05/8	2000	-20	260	80 (APHA)	1
Temest U05/7	11450	-20	260	80 (APHA)	1
Temest 6095 HVK	47000	-20	260	80 (APHA)	1





Application Guide

Stroke Engine Oil

Commercial Name	Chemical Description	Applications
Temest J05	Di Ethylhexyl Adipate	2 and 4 stroke engine oils
Temest L05	Di Isodecyl Adipate	2 and 4 stroke engine oils
Temest J30	Di Ethylhexyl Sebacate	2 and 4 stroke engine oils
Temest H35	TMP Pelargonate	2 and 4 stroke engine oils
Temest J200	bis-(2 Ethylhexyl) Dimerate	2 stroke motor oils
Temest MH08	TMP Complex Ester	High competition

Metal Working

Cutting Fluid

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	Smoking Point °C	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest 2EHC	2 Ethylhexyl Cocoate	6	115	-20	High	>65 %
Temest 2EHP	2 Ethylhexyl Palmitate	8.5	115	-2	High	>65%
Temest 2EHL	2 Ethylhexyl Laurate	5	115	-15	High	>65 %
Temest J60	2 Ethylhexyl C16C18	9	115	-5	High	>65%
Temest H35	TMP Pelargonate	20.5	>140	-48	High	>65 %
Temest MH08	TMP Complex Ester	450	>180	-20	High	>65%
Temest H4535	TMP Complex Ester	40	>140	-20	High	>65%
Temest J70	2 Ethylhexyl Tallowate	8	115	-10	High	>65%



Industrial Lubricants

Hydraulic Fire Resistant

A = version with additive available on request

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	A	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest F65	NPG Dioleate	22	x	-25	Medium	>80%
Temest HF65	Complex Ester	32	x	-25	Medium	>80%
Temest H65	TMP Trioleate	46	x	-35	Medium	>80%
Temest H6505	TMP Trioleate Complex Ester	68	x	-35	Medium	>80%

Long Life

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	A	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest H35	TMP Tripelargonate	20.5	x	-48	High	>65%
Temest MH08	TMP Complex Ester	450	x	-20	High	>65%
Temest HFQ	TMP Complex Ester	22 - 32 - 46 - 68 - 100	x	-35	High	>65%
Temest HLL	TMP Complex Ester	22 - 32 - 46 - 68 - 100	x	-35	High	>65%

Gear

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	A	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest HFQ	TMP Complex Ester	150 - 220 - 320 - 460		-35	High	>65%
Temest GEAR	TMP Complex Ester	150 - 220 - 320 - 460		-20	High	>65%

High Temperature Oil

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	A	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest HT	TMP Complex Ester	150 - 220 - 320 - 460		-35	High	>65%
Temest HTA	TMP Complex Ester	150 - 220 - 320 - 460		-20	High	>65%

Compressor Compressor Oil

A = version with additive available on request

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	A	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest H35	TMP Tripelargonate	20.5	x	-48	High	>65%
Temest MH08	TMP Complex Ester	450	x	-20	High	>65%
Temest HFQ	TMP Complex Ester	22 - 32 - 46 - 68 - 100	x	-35	High	>65%
Temest HLL	TMP Complex Ester	22 - 32 - 46 - 68 - 100	x	-35	High	>65%

Refrigeration Oil

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	A	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest H35	TMP Tripelargonate	20.5	x	-48	High	>65 %
Temest MH08	TMP Complex Ester	450	x	-20	High	>65%
Temest HFQ	TMP Complex Ester	22 - 32 - 46 - 68 - 100	x	-35	High	>65%

Turbine Oil

Commercial Name	Chemical Description	Viscosity Range cSt 40°C	A	Pour Point °C	Thermal Resistance	Biodegradability OECD 301B
Temest H35	TMP Tripelargonate	20.5	x	-48	High	>65%
Temest MH08	TMP Complex Ester	450	x	-20	High	>65%
Temest HFQ	TMP Complex Ester	22 - 32 - 46 - 68 - 100	x	-35	High	>65%
Glylub® 13	TML 810	54		-45	High	<60%
Glylub® 23	IDTM	140		-28	High	<60%
Glylub® 33	ITTM	300		-13	High	<60%
Temest J100	TOTM	95		-30	High	<60%





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