



IOI OLEOCHEMICAL

TECHNICAL APPLICATIONS

Performance Chemicals

for Technical Applications





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IOI Oleo GmbH

Expertise and Passion for Esters – Our credo of expertise and passion guides us in everything we do

We are the German subsidiary of the Malaysian IOI Oleochemical and are one of the leading European suppliers of oleochemical specialties.

With over 330 employees at our headquarters in Hamburg and the two production sites in Witten and Wittenberge, we produce and market a wide range of oleochemical products for a variety of industrial applications. Under the brand name SOFTENOL®, IOI Oleo GmbH offers solutions especially for technical applications which are well-known throughout the world for their reliable performance.

In our R&PD centers we develop innovative, customized products that add value to your business. Our service includes competent technical support by our Application Department before and after sales.

Committed to their success we devote all our expertise and passion to our customers needs.

You are cordially invited to experience sustainable business with IOI Oleo GmbH.

Technical Applications

IOI Oleo GmbH offers a broad range of products for technical applications under the brand name SOFTENOL®. The majority of these products are manufactured from natural-based raw materials, making them biodegradable, physiologically safe, and in many cases suitable for use in the food industry.

At the same time IOI Oleo is following a strong sustainability approach, from social aspects to resource saving aspects over the whole supply chain of our products.

SOFTENOL® types perform in different application areas, such as

- Processing aids for the EPS industry: single components, ready-to-use solutions, anti-static agent
- deep drawing oils for aluminium and tin plates
- base oils for lubricant formulation, also suitable for the food industry
- lubricants for feeding cables

Besides the above mentioned examples other fields of applications are possible. Don't hesitate to contact us if you are interested in exploring new paths together with us.

In the EPS industry we are the expert for tailor-made coating solutions, perfectly fitted to your requirements. Your request for special modifications is always welcome.



SOFTENOL® additives for the EPS industry

Technical Applications offers either single components for self-mixing purposes and all-in-one/ready-to-use solutions for direct use without further required processing.

SINGLE COMPONENTS

For your own coating formulations. Our processing aids can be used for white/grey/black EPS from suspension and extrusion processes.

Product name	Chemical description	Appearance	Acid value mg KOH/g	Saponification value mg KOH/g	Iodine value g I ₂ /100 g	Melting point °C	Hydroxyl value mg KOH/g	Monoglyceride content %	Glycerol content %
SOFTENOL® 3118	Triglyceride	fine powder	max. 1	185–195	max. 2	≈ 72	max. 5	–	–
SOFTENOL® 3168	Triglyceride	fine powder	max. 5	190–205	max. 3	≈ 62	max. 10	–	–
SOFTENOL® 3169	Triglyceride	fine powder	max. 5	170–200	max. 2	≈ 71	max. 5	–	–
SOFTENOL® 3285	Hydrogenated castor oil	fine powder	max. 4	min. 170	–	≈ 85	–	–	–
SOFTENOL® 3945	Mono-di-glyceride	fine powder	max. 3	158–175	max. 3	≈ 60	–	≈ 45	max. 2
SOFTENOL® 3995	Monoglyceride	fine powder	max. 3	155–170	max. 2	≈ 70	–	min. 90	max. 2
SOFTENOL® 3941	Monoglyceride	fine powder	max. 3	150–170	max. 2	≈ 78	–	min. 90	max. 2

READY-TO-USE SOLUTIONS

These processing aids can be used without any mixing for white/grey/black EPS from suspension and extrusion processes.

Product name	Chemical description
Softenol® 0560	Standard mixture of GMS, GTS and Zinc Stearate
Softenol® 3783	New technology of a vegetable based coating agent. Single use combined with full performance.
Softenol® 2100	New technology of a vegetable based coating agent. Single use combined with full performance.

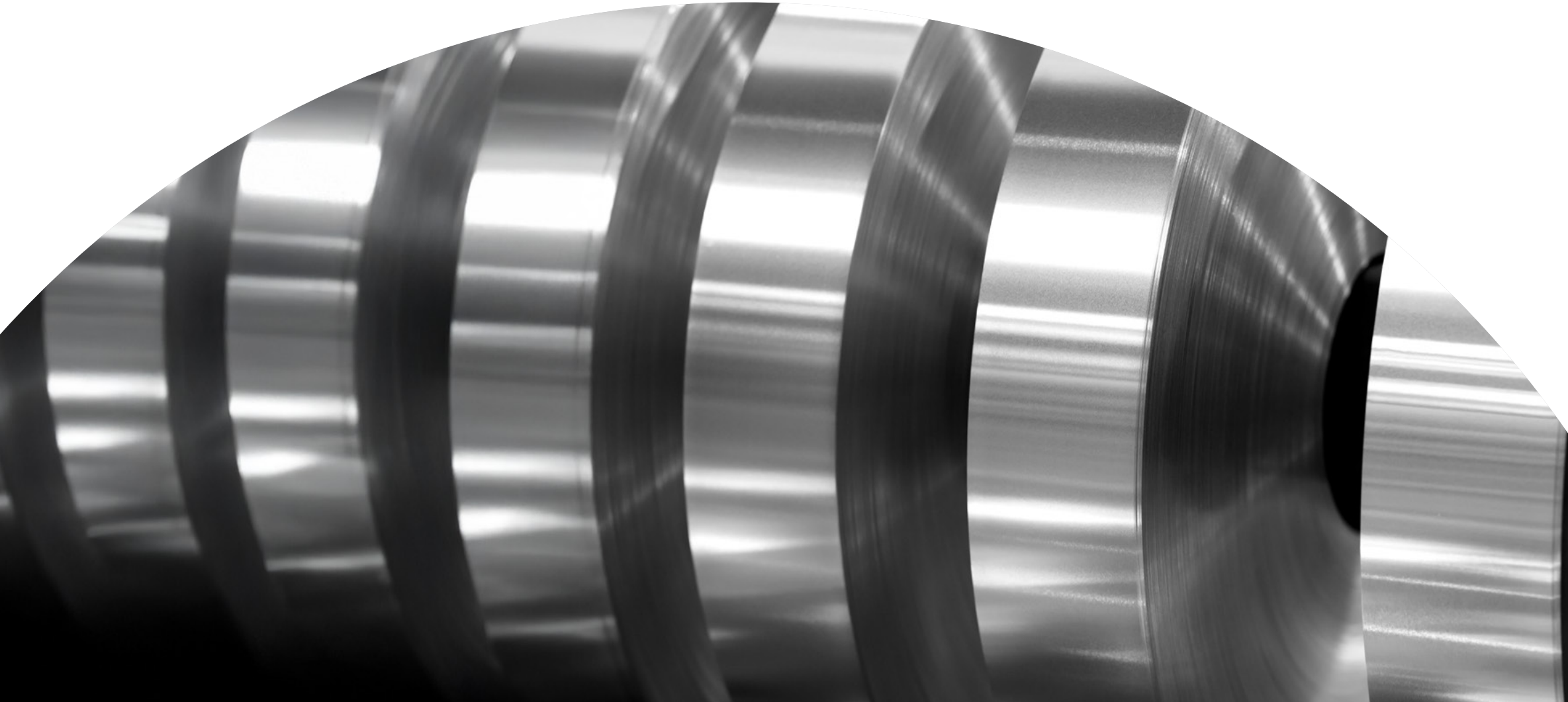
ANTI-STATIC AGENT

Product name	Chemical description	Application
SOFTENOL® 3767	Oxyethylation product of medium chain partial glycerides	Antistatic agent for naked EPS beads to enable fraction sieving



SOFTENOL® lubricants and other applications

Product name	Chemical description	Application/properties	Appearance	Acid value mg KOH/g	Saponification value mg KOH/g	Iodine value g I ₂ /100 g	Hydroxyl value mg KOH/g	Dyn. Viscosity 20 °C mPas	Kin. Viscosity 40 °C mm ² /s	Density 20 °C	APHA Colour %	Water %
SOFTENOL® 3108	Glycerol-Tricaprylate-Caprate	- Multipurpose base oil - Sliding and anti-blocking agent - Lubricant for feeding cables - NSF H1 lubricant	liquid	max. 0.2	310–360	max. 0.5	–	24–36	12–17	0.92–0.96	max. 100	–
SOFTENOL® 3408	1,2-Propanediol Dicaprylate/caprate	Lubricant, release agent for the food industry	liquid	max. 1	300–340	max. 1	–	≈ 11	5–7	≈ 0.92	–	–
SOFTENOL® 3600	Polyglycerol Polyricinoleate	Used as adhesive agent during dry coating, applicable in the food industry	liquid	max. 6	175–190	75–95	80–100	200–500 (60 °C)	–	–	–	–
SOFTENOL® 3660	Oleyl Erucate	Additive for cutting and lubricating oils	liquid	max. 1	95–110	85–95	max. 10	25–35	–	0.86–0.87	–	–
SOFTENOL® 3765	Aqueous preparation based on oxethylation product of medium Chain partial glycerides	Release agent for gluethreads for the bonding of veneers	liquid	–	≈ 50	–	–	–	–	–	–	–
SOFTENOL® 3803	Ester of saturated fractionated plant fatty acids	Deep drawing oil for forming of aluminium foils and tin plates; NSF 3H lubricant	liquid	max. 2	310–360	–	–	24–36	–	–	–	max. 150
SOFTENOL® 3829	Ester of saturated fractionated plant fatty acids	Deep drawing oil for the forming of aluminium foils and tin plates; NSF 3H lubricant	liquid	max. 2	400–450	max. 2	–	230–260	70–80	1.00–1.02	–	–



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