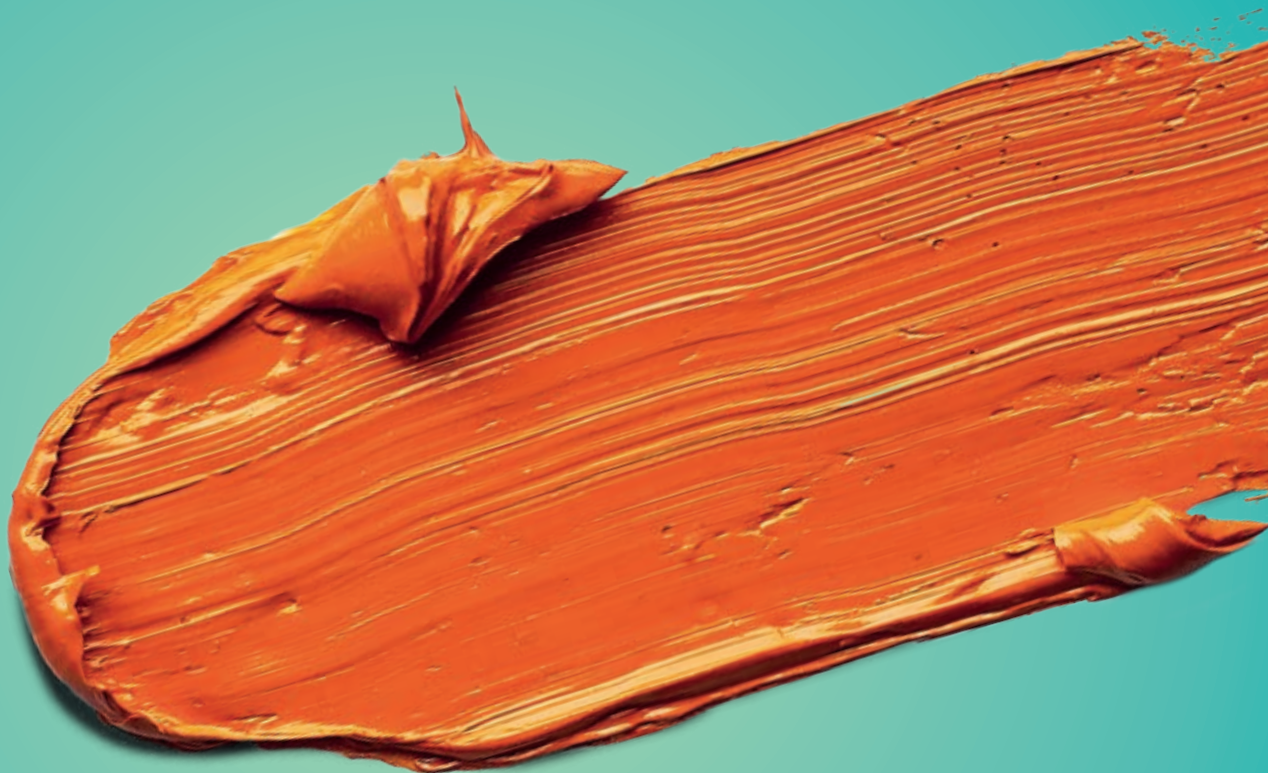




products from renewable sources



PLASTIC, COATING AND INK **ADDITIVES**

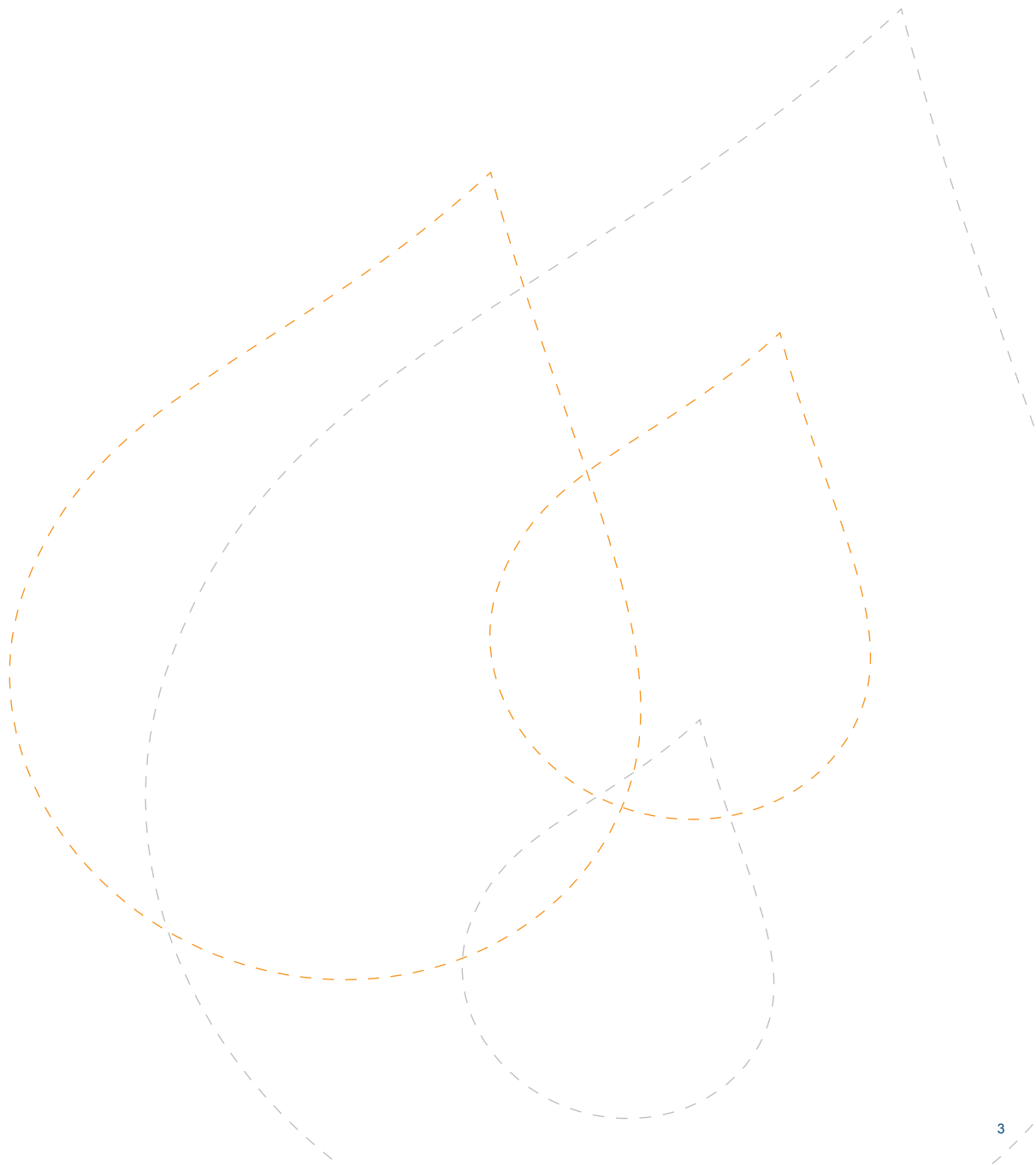
global@temixoleo.com - www.temixoleo.com

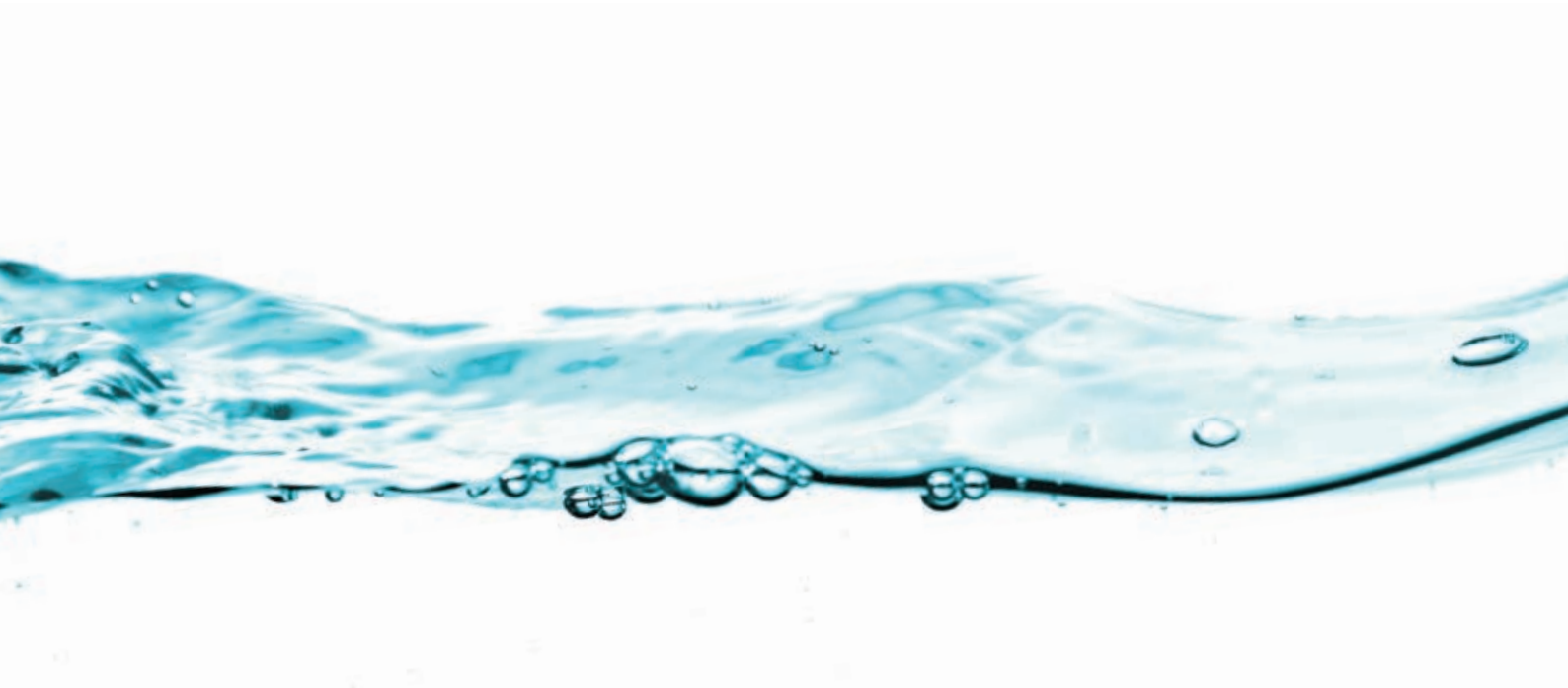


PRODUCTS FROM RENEWABLE SOURCES
ESTERIFYING
IS OUR ATTITUDE



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Enhancing your **Natural** portfolio

Temix Oleo was founded in October 2014 by the merger of Oleochimica Italia (previously Undesa Italia) and Temix International. Given its roots, the new company is based in strong historical traditions and values, offering wide expertise in the respective industries of its predecessors: detergents and cosmetics (Temix international), lubricants, rubber and other industrial application products (Oleochimica Italia).

Honouring Temix International's slogan "Enhancing your natural portfolio", **Temix Oleo** combines experience in the distribution of raw materials, selected mainly from renewable sources, along with technology and experience by Oleochimica Italia in esters and fatty acids production.

Real sustainability

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

Research and Development

With an ever-changing market, the ability to innovate is a paramount goal. **Temix Oleo** continually invests in technological innovation, particularly through its Research and Development efforts.

Customized products

Temix Oleo has the ability to develop tailor-made products designed to meet all its customer's needs. Our sales office will be happy to help you in giving further information on technical details of this process.

OUR PRODUCT RANGE

IS BASED ON SEVERAL RAW MATERIALS:

Methyl Alcohol

Isopropyl Alcohol

Ethylhexyl Alcohol

Isodecyl/ n-Decyl Alcohol

Isotridecyl / Tridecyl Alcohol

Neopentylglycol

Glycerol

Trimethyl Propanol Alcohol

Pentaerythryl Alcohol

PEG

Phthalic Anhydride

Trimellitic Anhydride

Caprylic Acid

Pelargonic Acid

Capric Acid

Caprylic/Capric Acid

Lauric Acid

Coconut Acid

Palmitic Acid

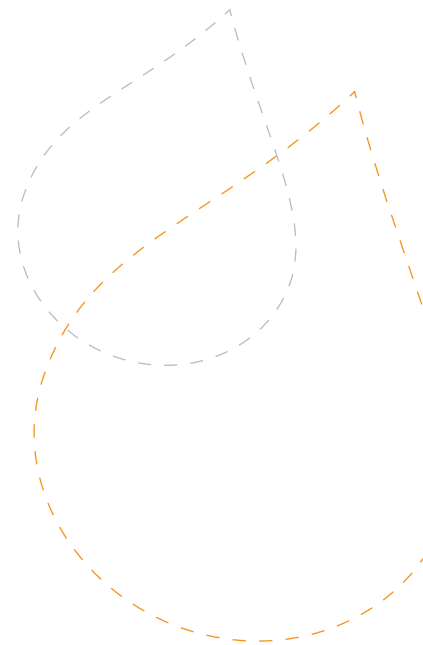
Stearic Acid

Oleic Acid

Adipic Acid

Azelaic Acid

Sebacic Acid



The background of the entire page is an abstract, painterly composition of teal and green brushstrokes. The strokes are thick and expressive, creating a sense of movement and depth. The colors range from light, airy greens to deep, saturated teals and blues. The overall effect is organic and textured, reminiscent of a close-up of foliage or a natural landscape.

SPECIAL ESTERS

Temix Oleo offers a wide range of esters for several applications destined to our customers, through a process open to study new potential products or new applications for existing ones.



ANTISTATIC PLASTICIZERS

Highly polar polymeric plasticizers with enhance antistatic properties, they are able to absorb atmospheric moisture and reduce the electrical surface resistance of the end artefacts. Glyplast® AS1*, Glyplast® AS3* y Glyplast® AS809* impart resistivity of the order of 106 ohm exhibiting low volatility and obtaining excellent mechanical properties at low temperatures. Glyplast® AS3* is suitable for food contact application following the 10/2011EC legislation.

PRODUCT NAME	DESCRIPTION	COLOUR HAZEN	DENSITY G/CM ³	REFRACTION INDEX (25°C)	ACID NUMBER MG KOH/G	WATER CONTENT %	APPLICATIONS
GLYPLAST® AS3*	Poly(Ethylenglycol 2-Ethylhexanoate)	90	1,11	1,45	max 3	max 1	Sole PVC shoes, articles, hose, sheets, rubber and PVC articles
GLYPLAST® AS2*	Poly(Ethylenglycol Laurate)	90	1,11	1,45	max 3	max 2	Sole PVC shoes, articles, hose, sheets, rubber and PVC articles
GLYPLAST® AS809*	Butyldiglycol Adipate Derivated	2	1,02	1,45	max 3	max 3	Sole PVC shoes, articles, hose, sheets, rubber and PVC articles

(*) The series Glyplast® is a trademark of Condensia Quimica SA

DEMOLDING AGENT

Highly polar low molecular weight polymer Glyplast 706/5° is suitable as demolding agent. It is characterized by high water solubility that permits a rapid removing from barrels and molds. It can be used as a secondary plasticizer in vinyl acrylic emulsions.

PRODUCT NAME	DESCRIPTION	COLOUR	ESTER CONTENT %	DENSITY G/CM ³ (25°C)	VISCOSITY MPA.S (25°C)	ACID NUMBER MG KOH/G	WATER CONTENT %	APPLICATIONS
GLYPLAST® 706/5*	Polyether Ester	(Gardner)3	>99,9	1,13	2000	max 2,5	max 0,1	Barrel demolding, hose, rubber

(*) The series Glyplast® is a trademark of Condensia Quimica SA



ADDITIVES FOR BIO-PLASTICS

Temix Oleo offers a range of additives specially designed for being used in combination with biopolymers, mainly PLA (Poly(Lactic Acid)) PHA, (Poly(Hydroxy Alcanoates)), starch based polymers etc. They can be used as plasticizers, chain extenders, nucleating agents and nanofiller compatibilizers; showing low volatility, low migration, good thermal stability and total biodegradability.

LACTIC ACID OLIGOMERS

Derivated from bio-renewable and fully biodegradable and compostable raw materials, they are used in mix with PLA, allowing stretched films with excellent mechanical properties without loss of transparency. Furthermore, they can be used such as impact strength modifiers, chain extender, nucleating agents, etc.

PRODUCT NAME	DESCRIPTION	ESTER CONTENT %	DENSITY g/cm ³	VISCOSITY mPa.s	ACID NUMBER mg KOH/g	WATER CONTENT %	APPLICATIONS
GLYPLAST® OLA2*	Complex Lactic Acid Polyester	>99	1,10	90 (40°C)	max 2.5	max 0.1	Completely biodegradable PLA.
GLYPLAST® OLA8*	Complex Lactic Acid Polyester	>99	1,11	22.5 (100°C)	max 1.5	max 0.1	Completely biodegradable PLA, PHA, starch base, material plasticizers. Cling films, calendered object, ropes, cables, tissues.
GLYPLAST® OLA9*	Complex Lactic Acid Polyester	>99	1,12	40 (100°C)	max 1.5	max 0.1	Completely biodegradable nucleating agent for PLA.
GLYPLAST® OLA10*	Complex Lactic Acid Polyester	>99	1,14	3000 (100°C)	max 30	max 0.1	Completely biodegradable chain extenders for PLA.
GLYPLAST® OLA11*	Complex Complex Lactic Acid Polyester Acid Polyester	>99	1,13	100 (40°C)	max 1.5	max 0.1	Completely biodegradable. Compatibilizer for grafting of nanocellulose, montmorillonite, nano filler.

(*) The series Glyplast® is a trademark of Condensia Quimica SA

POLYADIPATES

Low viscosity saturated polyesters give excellent results whether used as plasticizers, in PLA and they give proof a good flexibility. They permit an easy handling and processing at low temperatures. They are highly biodegradable and listed in the EU 10/2011 FDA food contact lists.

PRODUCT NAME	DESCRIPTION	ESTER CONTENT %	DENSITY g/cm ³	VISCOSITY mPa.s (25°C)	ACID NUMBER mg KOH/g	WATER CONTENT %	APPLICATIONS
GLYPLAST® 206/3 NL*	Polyadipate Ester	>99	1,08	(25°C) 900	max 1.5	max 0.1	Partially biodegradable, high compatible plasticizer for PLA, Food contact approved.

(*) The series Glyplast® is a trademark of Condensia Quimica SA



POLYESTER-POLYOLS FOR PU

Polyester-polyols are low molecular weight polymers, characterized by hydroxyl terminal group, useful for the preparation of flexible and rigid polyurethanes (PUs). Normally, these polyesters are highly crystalline if compared to their polyether equivalents. For this reason, they impart peculiar characteristics to PUs such as the resistance to solvents, hydrolysis, weather condition, fire etc.

The polyester-polyols are used for the production of elastomers, flexible foams, coatings, adhesives, rigid foams, synthetic leather, sealants, etc. They are rapidly biodegradable and can be obtained from renewable sources, so lowering the carbon footprint of PUs.

POLYADIPATES

Linear or lightly branched polyester- polyols based on aliphatic acids and polyalcohols polydipates are ideal for thermoplastic PUs (TPUs), coatings and adhesives. They are specially designed for flexible foams where their high resistance to solvents and flames make these aliphatic polyesters the product of choice. They also offer excellent elongation and tensile properties and they improve resistance to abrasion in several applications.

PRODUCT NAME	DESCRIPTION	FUNCTIONALITY	VISCOSITY mPa.s	ACID NUMBER mg KOH/g	OH VALUE mg KOH/g	APPLICATIONS
GLYPOL® 1025	Polyadipate Ester	2	3000 (60°C)	max 0.5	40	Thermoplastic PUs, adhesives, elastomers.
GLYPOL® 1027	Polyadipate Ester	2	1500 (60°C)	max 1.5	55	Thermoplastic PUs, adhesives, elastomers.
GLYPOL® 2035	Polyadipate Ester	2,5	9000 (60°C)	max 1.5	38	Flexible foams, microcellular elastomers, coating.
GLYPOL® 3020	Polyadipate Ester	2	450 (30°C)	max 1.5	180	Pigment adhesives, carrier, soft elastomers, coating.
GLYPOL® 3035	Polyadipate Ester	2,3	25000 (25°C)	max 1.5	60	Flexible foams, coating.
GLYPOL® 4027	Polyadipate Ester	2	8500 (25°C)	max 1.5	55	Thermoplastic PUs, adhesives, elastomers.
GLYPOL® 4029	Polyadipate Ester	2	4500 (25°C)	max 1.5	56	Thermoplastic PUs, adhesives, elastomers.
GLYPOL® 4035	Polyadipate Ester	2,2	1600 (60°C)	max 1.5	56	Flexible foams, microcellular elastomers, coating.
GLYPOL® 5029	Polyadipate Ester	2	1000 (25°C)	max 1.5	46	Adhesives, coatings, TPUs, elastomers.

(* The series Glypol® is a trademark of Condensia Quimica SA

POLYSEBACATES

Linear or lightly branched polyester-polyols based on renewable raw materials polisebates are ideal for thermoplastic PUs (TPUs), coating and adhesives application . They are characterized by a low environmental profile and they are ideal for biodegradable PUs. Polysebacates are solid polyols at room temperature but they can be easily manipulated at 60°C.

PRODUCT NAME	DESCRIPTION	FUNCTIONALITY g/cm ³ (25°C)	DENSITY (25°C)	VISCOSITY mPa.s	ACID NUMBER mg KOH/g	OH VALUE mg KOH/g	APPLICATIONS
GLYPOL® 470/2	Polysebacate Ester	2	1,08	150 (100°C)	max 0.5	50	Biodegradable adhesives, elastomers, thermoplastic PUs.
GLYPOL® 470/5	Polysebacate Ester	2	1,09	2000 (100°C)	max 1.5	25	Biodegradable adhesives, elastomers, thermoplastic PUs.
GLYPOL® 170/2	Polysebacate Ester	2	1,08	850 (60°C)	max 1.5	60	Microcellular elastomers, coating.

(* The series Glypol® is a trademark of Condensia Quimica SA

POLYPHTHALATES

Aromatic polyester-polyols, polyphthalates are designed for bulding insulation, polyisocyanurate foams and in combination with polyether-polyols. They are used for spraying applications too. Moreover they offer a good compromise considering cost and performance for fire resistance application.

PRODUCT NAME	DESCRIPTION	FUNCTIONALITY	VISCOSITY mPa.s	ACID NUMBER mg KOH/g	OH VALUE mg KOH/g	APPLICATIONS
GLYPOL® 3920	Polyphthalates	2	2200 (25°C)	max 2.5	315	Flexible foam for spraying applications.
GLYPOL® 3921	Polyphthalates	2	1000 (25°C)	max 1.5	190	Rigid foams for thermal and sound isolation.

(* The series Glypol® is a trademark of Condensia Quimica SA



PLASTICIZERS FOR RUBBER AND PVC

Plasticizers are inert organic substances with low vapor pressure, predominantly esters or polyesters, which interact physically with high polymers (PVC, NR, NBR, PVA, etc.) to form a homogeneous material, modifying its mechanical and thermal properties. A plasticizer may reduce the melt viscosity, lowering the glass transition or lowering the elastic modulus of the final product.

Low molecular weight polymers incorporated into a polymeric matrix allow our products to offer outstanding properties such as migration and extraction resistance, weather stability and good environmental compatibility. Due to these remarkable properties, polymeric plasticizers are conformed to the stricter law ruling food contact materials (EU and FDA).

POLYMERIC PLASTICIZERS

PRODUCT NAME	DESCRIPTION	VISCOSITY mPa.s (25°C)	ACID NUMBER mg KOH/g	WATER CONTENT %	APPLICATIONS
GLYPLAST® 1070 C*	Complex esters	15000	max 2.5	max 0.1	Films, conveyor for oil and labels, belts, grease, canvas, safety technical footwear, parts, tubes for oil and greases.
GLYPLAST 206/3NL	Complex esters	900	max 1.5	max 0.1	Compounds, stretch films, tapes adhesives, surface coatings, upholstery, technical parts. Food contact approved.
GLYPLAST 206/5 NL	Complex esters	2200	max 1.5	max 0.1	Compounds, cling films, tapes adhesives, surface coatings, upholstery, technical parts. Food contact approved.
GLYPLAST 206/6 NL	Complex esters	2700	max 1.5	max 0.1	Tapes, labels, conveyor belts, food bles, technical parts, footwear, leather clothing, high extraction applications. Food contact approved.
GLYPLAST 206/7 NL	Complex esters	4000	max 1.5	max 0.1	Tapes, labels, conveyor belts, food bles, technical parts, footwear, leather clothing, high extraction applications. Food contact approved.
GLYPLAST 206/8 NL	Complex esters	7000	max 1.5	max 0.1	Tapes, labels, conveyor belts, food bles, technical parts, footwear, leather clothing, high extraction applications. Food contact approved.
GLYPLAST 206/9 NL	Complex esters	10000	max 1.5	max 0.1	Printing rollers, elastic films, tubes, hoses, elastic, films, coating gaskets, technical articles. Food contact approved.
GLYPLAST® 2106/7*	Complex esters	4000	max 1.5	max 0.1	Compounds, films, tapes, adhesives, surface coatings upholstery, technical parts.
GLYPLAST® 392*	Complex esters	850	max 1.5	max 0.1	Tablecloths, curtains, films, pipes tubing, technical articles, adhesive sheets.
GLYPLAST® 201/6 NL*	Complex esters	2750	max 1.5	max 0.1	Tablecloths, curtains, films, pipes tubing, technical articles, adhesive sheets.
GLYPLAST® 201/8 NL*	Complex esters	7000	max 1.5	max 0.1	Tablecloths, curtains, films, pipes tubing, technical articles, adhesive sheets.

(*) The series Glyplast® is a trademark of Condensia Quimica SA



ADIPATES

Our plasticizers are designed to offer outstanding mechanical properties in a wide range of temperature, retaining good flexibility, workability, with a plus due to negligible toxicity. They are rapidly incorporated into polymeric matrix and can be mixed with polymeric plasticizers, so improving the working time.

PRODUCT NAME	DESCRIPTION	COLOUR HAZEN	ESTER CONTENT %	DENSITY g/cm ³ (25°C)	ACID NUMBER mg KOH/g	WATER CONTENT %	APPLICATIONS
TEMPLAST J05	Bis(2-Ethylhexyl Adipate)	20	>99.9	0,92	max 0.1	max 0.1	Gaskets, contact approved, footwear, cables, technical articles, toy, surfaces, canvas, films. Food contact approved.
TEMPLAST L05	Di(Isodecyl Adipate)	20	>99.9	0,92	max 0.1	max 0.1	Artificial leather, dryblend, films, surface coatings, inks, technical articles, toys, hoses, conveyor belts, vibration deadeners, sound absorbers.



SEBACATES

Our plasticizers are designed to offer outstanding mechanical properties, at very low temperature maintaining an excellent extraction resistance. They are rapidly incorporated into the polymer matrix and can be mixed with polymeric plasticizers so improving the working time.

PRODUCT NAME	DESCRIPTION	COLOUR HAZEN	ESTER CONTENT %	DENSITY g/cm ³ (25°C)	ACID NUMBER mg KOH/g	WATER CONTENT %	APPLICATIONS
TEMPLAST J30	Bis(2-Ethylhexyl Sebacate)	70	>99.9	0,91	max 0.2	max 0.1	Rubber tubes, cables gaskets and hoses, PVC. Very technical low temperature articles and belts.
TEMPLAST L30	Di(Isodecyl Sebacate)	80	>99.9	0,92	max 0.25	max 0.1	Dashboards, articles, gaskets, electrical pipes, wires, technical

AZELATES

PRODUCT NAME	DESCRIPTION	COLOUR HAZEN	ESTER CONTENT %	DENSITY g/cm ³ (25°C)	ACID NUMBER mg KOH/g	WATER CONTENT %	APPLICATIONS
TEMPLAST J110	Bis(2-Ethylhexyl Azelate)	100	>99.9	0,91	max 0,2	max 0,1	Rubber tubes, cables gaskets and hoses, PVC. Very technical low temperature articles and belts.



TRIMELLITATES

Our plasticizers are particularly designed for high temperature performance retaining good characteristics of migration resistance and volatility, workability, flexibility and gelling power, at low temperature too. They are a good compromise at low and high temperature for performing application such as automotive cables and power electrical cables.

PRODUCT NAME	DESCRIPTION	COLOUR HAZEN	ESTER CONTENT %	DENSITY g/cm ³ (25°C)	ACID NUMBER mg KOH/g	WATER CONTENT %	APPLICATIONS
TEMPLAST J100	TOTM	85	>99.9	0,98	max 0.2	max 0.1	Power cables (ISO 6722 Class B), dashboards, sheets, profiles, gaskets.
TEMEPLAST I100	C8-C10 TM	125	>99.9	0,97	max 0.2	max 0.1	Electrical cables (ISO 6722 Class C), dash boards, high temperature technical articles, gaskets, profiles.
TEMPLAST T100	C9 TM	100	>99.9	0,97	max 0.15	max 0.1	Electrical cables (ISO 6722 Class C), dash boards, high temperature technical articles, gaskets, profiles.
TEMPLAST L100	C10 TM	100	>99.9	0,96	max 0.15	max 0.1	Electrical cables (ISO 6722 Class C), dash boards, high temperature technical articles, gaskets, profiles.
TEMPLAST M100	C13 TM	100	>99.9	0,96	max 0.15	max 0.1	Electrical cables (ISO 6722 Class C), dash boards, high temperature technical articles, gaskets, profiles.

ADDITIVES FOR PVC

We offer a comprehensive range of internal and external additives to improve the properties of PVC and other vinyl polymers. Our additives can be classed as either internal or external lubricants, providing different characteristics during polymer processing. Choosing an additive depends upon polymer formulation, processing technique and final application. Dosing levels are usually between 0.5 and 2% inclusion and can be added either directly to the resin or via a suitable masterbatch.

External lubricants work on metal / polymer surface reducing friction and making polymer slide over. They are active both in the melt phase and the solid phase and help deliver: lower friction between the melt and processing surface / Improved mold release / reduced adhesion of resin.

Internal lubricants are designed to be highly compatible with the PVC polymer matrix, helping to reduce friction within the melt. They are active in the molten phase and can help deliver: Lower melt viscosity / Improved flow / Better mold filling / reduced energy consumption.

PRODUCT NAME	FUNCTION	CHEMISTRY	DOSAGE (%)
TEMPLAST N85	Lubricant, internal	Glycerol esters	0,5 - 2,5
TEMPLAST DO	Lubricant, internal	Fatty Acid of polygol	0,5 - 1,5
TEMPLAST GMO	Lubricant, internal	Glycerol esters	0,5 - 2,5
TEMPLAST 5560	Lubricant, external	Fatty Acid	0,1 - 0,5
TEMPLAST M60	Lubricant, internal	Wax Ester	0,2 - 1,5
TEMPLAST G65005	Lubricant, external	Fatty Acid of polygol	0,2 - 0,8
TEMPLAST G6065	Lubricant, internal	poly ester	0,2 - 1,0
TEMPLAST S65MPG	Antifogging	Fatty acid compound	2,0 - 4,0
TEMPLAST N65	Lubricant, internal	Glycerol esters	0,5 - 2,5

PRODUCT NAME	PVC-P				PVC-U			
	EXTRUSION	CALANDERING	INJECTION MOULDING	PASTE	PROFILE SHEET	PIPE	INJECTION MOULDING	FILM
TEMPLAST N85	x	0	x	x				
TEMPLAST DO					x			
TEMPLAST GMO					0		0	x
TEMPLAST 5560	x	x	x		x	x	0	
TEMPLAST M60	x	x	x		x			
TEMPLAST G6005	x	x	x	x				0
TEMPLAST G6065	x	x	x	x				0
TEMPLAST S65MPG	x							
TEMPLAST N65					0		x	x



ADDITIVES FOR ADHESIVES AND VARNISHES

Esters and polyesters are frequently utilized such as additives for adhesives and paint due to their unique physical-chemical properties and the compatibility with a high number of formulations used in paint, coating, adhesives, lacquer etc. They can be used as pigment carrier, mechanical properties modifier, compatibilizers, emulsion stabilizer etc.



POLYADIPATES

Water dispersible aliphatic polyester, highly polar Polyadipates, are specially designed for aqueous resin systems based on polyvinyl acetate (PVA) and its co-polymers. They are recommended for beigin use in adhesives, coatings, bindings etc. They permit to improve the dispersibility of vinyl-acrylic resin in adhesive waterbone systems.

PRODUCT NAME	DESCRIPTION	COLOUR HAZEN	OH VALUE mg KOH/g	DENSITY g/cm ³ (25°C)	ACID NUMBER mg KOH/g	VISCOSITY mPa.s (25°C)	APPLICATIONS
GLYPLAST® 7024*	Complex Polyadipate	250	20	1,17	15	7500	Acrylic, varnishes, adhesives, vinylcaulks, waterpaints, inks, dispersions, adhesives, paints, varnishes, caulkes, inks.

(*) The series Glyplast® is a trademark of Condensia Quimica SA



ADDITIVES FOR COATINGS AND INKS

Temix Oleo offers a range of additives specially designed for being used in coating and inks applications.

ADDITIVE (PLASTICIZER - NONTOXIC PLASTICIZER SERIES)

Plasticizers are used to make film of printing ink dried and more flexible. Plasticizers employed in printing inks are usually esters of medium sized alcohols, once with phthalic acid and today with citric acid, stearic acid, sebacic acid etc.

ADIPATES

PRODUCT NAME	CHEMICAL DESCRIPTIONS	KINEMATIC VISCOSITY @ 40 °C (cSt)	POUR POINT (°C)	FLASH POINT (°C)	COLOR	IODINE VALUE (gI ₂ /100g)
TEMCOAT L05	Iso Decyl Adipate	15	-55	216	20 (APHA)	0
TEMCOAT M05	Iso Trydecyl Adipate	27	-45	230	50 (APHA)	0
TEMCOAT J05	Bis 2Ethylhexyl Adipate	8	-60	207	20 (APHA)	0
TEMCOAT E05M	DBE	5	-60	136	1 (Gardner)	0
TEMCOAT A05M	DBE	5	-60	136	1 (Gardner)	0

BUTYL ESTERS

PRODUCT NAME	CHEMICAL DESCRIPTIONS	KINEMATIC VISCOSITY @ 40 °C (cSt)	POUR POINT (°C)	FLASH POINT (°C)	COLOR	IODINE VALUE (gI ₂ /100g)
TEMCOAT E60	Butyl Stearate	6	18	160	2 (Gardner)	1
TEMCOAT D65	Isobutyl Oleate	6,2	-20	160	2 (Gardner)	80
TEMCOAT E65	Butyl Oleate	6,6	-18	160	1 (Gardner)	80
TEMCOAT D60	Isobutyl Stearate	7	20	180	100 (APHA)	1
TEMCOAT E05	Di Butyl Adipate	7	-30	136	1 (Gardner)	1

SEBACATES

PRODUCT NAME	CHEMICAL DESCRIPTIONS	KINEMATIC VISCOSITY @ 40 °C (cSt)	POUR POINT (°C)	FLASH POINT (°C)	COLOR	IODINE VALUE (gI ₂ /100g)
TEMCOAT J30	Bis(2Ethylhexyl Sebacate)	11.5	-57	218	70 (APHA)	0
TEMCOAT L30	Bis(isodecyl Sebacate)	21	-71	250	80 (APHA)	0
TEMCOAT M30	Bis(isoTridecyl Sebacate)	34	-47	234	80 (APHA)	0

CITRATES

PRODUCT NAME	CHEMICAL DESCRIPTIONS	ESTER CONTENT %	DENSITY g/cm ³ (25°C)	ACID NUMBER mg KOH/g	WATER CONTENT %
TEMEST ATBC	Acetyl Tributyl Citrate	> 99	1,045-1,055	max 0,2	max 0,15
TEMEST TEC	TriEthyl Citrate	> 99	1,045-1,055	max 0,2	max 0,2

SOLVENT: A GREEN ALTERNATIVE

They are used to dissolve the binders of printing inks, and also, by manufacturers and printers to, adjust the viscosity of the ink to the printer's requirements. Solvents used in printing inks include mineral oil, other aliphatic and aromatic hydro-carbons, ketones, esters, and alcohols. Such substances do not take part in to any chemical reaction. Next to their chemical nature and, hence, their solubilizing properties, boiling point is the most crucial property when choosing suitable solvents.

For printing inks, the following boiling point ranges are commonly used:

Flexo and gravure from 80 to 140 °C

Screen printing from 130 to 210 °C

Heat-set web-offset from 240 to 280 °C

Cold-set web-offset, letter press from 280 to 320 °C

PRODUCT NAME	CHEMICAL DESCRIPTIONS	KINEMATIC VISCOSITY @ 40 °C (cSt)	POUR POINT (°C)	FLASH POINT (°C)	COLOR	IODINE VALUE (gl ₂ /100g)
TEMCOAT A6055	Stearic/Palmitic Methyl Ester	6,1	5	130	30 (apha)	67
TEMCOAT A20	Caprylic/Capric Methyl Ester	1,5	-39	80	30 (apha)	0,3
TEMCOAT A90	Soya Methyl Ester	4.0	-15	180	3 (Gardner)	90
TEMCOAT J200	2Ethylhexyl Dimerate	94	-45 °C	290	3 (Gardner)	n.a
TEMCOAT 2EHC	2 Ethylhexyl Cocoate	6	-20	170	100 (APHA)	max 15
TEMCOAT 2EHL	2 Ethylhexyl Laurate	5	-30	170	20 (apha)	1
TEMCOAT J05	Bis (2 Ethylhexyl) Adipate	8	-60	207	20 (APHA)	0



COALESCING AGENTS IN COATINGS

Coalescing agents / film formers are used in paint dispersion for optimizing the film formation process of the polymeric binder particles. Coalescing agents typically reduce the minimal formation temperature and as a consequence, they optimize film coherence and properties such as scrub resistance, mechanical properties as well as appearance.

Role of Coalescing Agents / Film Formers: If a dispersion paint film dries below the MFFT of its polymer, the film will be relatively brittle and a coherent film will not occur.

The MFFT can be reduced by the addition of coalescing agent: Coalescing agents act as temporary plasticizers for the polymer particle and thereby they reduce the MFFT. Coalescing agents allow the formation of polymeric films at room temperature conditions of film application.

Coalescing agents typically demonstrate one or more of following effects:

- Lowering the polymer TG
- Reducing surface area of polymers part icle
- Increasing capillary forces by controlled water evaporation
- Reduction of repulsive forces among polymer particles

PRODUCT NAME	CHEMICAL DESCRIPTIONS	KINEMATIC VISCOSITY @ 40 °C (cSt)	POUR POINT (°C)	FLASH POINT (°C)	COLOR	IODINE VALUE (g _l /100g)
TEMCOAT A4055	Lauric/Palmitic Methyl Ester	6,1	5	130	30 (apha)	67
TEMCOAT E05M	DBE	5	-60	136	1 (Gardner)	0
TEMCOAT A05M	DBE	5	-60	136	1 (Gardner)	0

RELEASE AGENTS IN COATINGS

A release agent is a chemical used to prevent other materials from bonding to surfaces. It can provide a solution in processes involving mold release, diecast release, plastic release, adhesive release, tire and web release.

Concrete

In the concrete construction industry, TEAMCOAT forms release agents preventing the adhesion of freshly placed concrete to the forming surface, usually plywood, overlaid plywood, steel or aluminum. In these applications, there are two types of release agents available: barrier and reactive. Barrier release agents prevent adhesion developing a physical film or barrier between the forming surface and the concrete.

Reactive release agents are chemically active and work by the process of a chemical reaction between the release agent and the free limes available in fresh concrete. A soapy film is created and prevents adhesion. Because it is a chemically reactive process, there is low residue or unreacted product left on the forming surface or concrete, providing a cleaner process.

Water - based release agents are the result of higher focus on health , environment and safety issues . This is the outcome of new technologies devoloment largely focused on water-based formulations , far away from petroleum - or solvent - based products.

PRODUCT NAME	CHEMICAL DESCRIPTIONS	KINEMATIC VISCOSITY @ 40 °C (cSt)	POUR POINT (°C)	FLASH POINT (°C)	COLOR	IODINE VALUE (g _l /100g)
TEMCOAT A90	Soja Methyl esters	5	-15	180	3 (Gardner)	90
TEMCOAT A6055	Stearic/Palmitic Methyl Ester	6,1	5	130	30 (apha)	67
TEMCOAT N65	GMO	37	-3	280	4 (gardner)	90
TEMCOAT N85	GMO	80	0	240	6 (gardner)	100



products from renewable sources

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