



SYNTHRON

MEMBER OF PROTEX INTERNATIONAL

PRODUCT list



**ADDITIVES
FOR THE PULP
AND PAPER
INDUSTRY**

YOUR ADVANCED SOLUTIONS PARTNER



WHERE ARE THE SYNTHRON PRODUCTS USED IN THE PAPER INDUSTRY ?

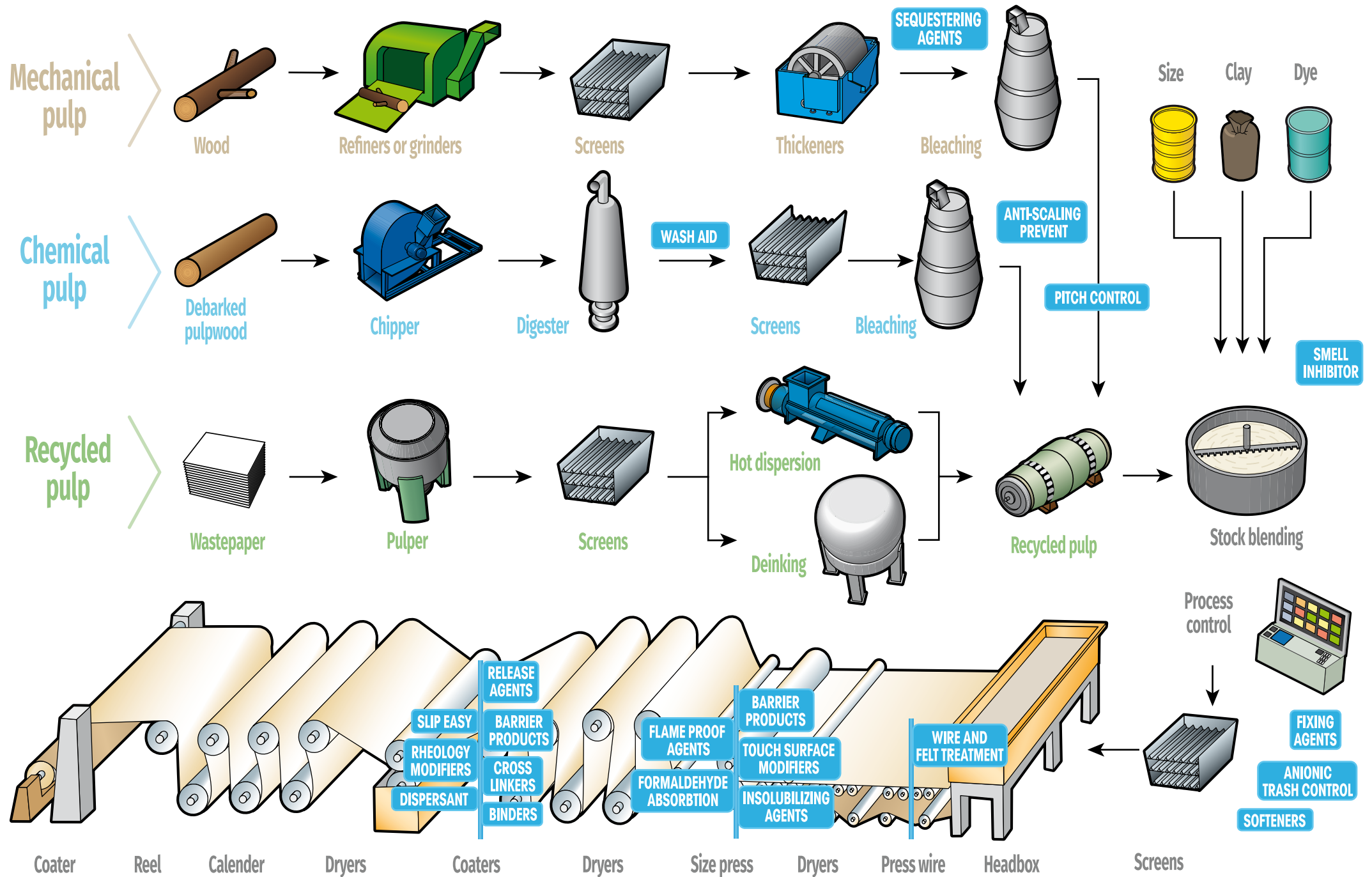


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VIRGIN & DE-INKED PULP

SEQUESTERING AGENTS FOR BLEACHING WITH H₂O₂

Actiron® DP 950	Excellent results in replacing DTPA, with a lower COD value.
Actiron® EP 319	Excellent results in replacing EDTA, with a lower COD value.
Actiron® DF 30	DTPA free sequestrant, with an EDTA content < than 4%. No CMR.
Actiron® B 329	Biodegradable sequestrant, DTPA and EDTA free.
Actiron® BF 324	Biodegradable sequestrant, DTPA, EDTA and phosphorus free.

WASH AID

Synthro®-Pon W	Green surfactant BFR, FDA and Ecolabel approval. APEO free.
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ANTI-SCALING PREVENT

Synthro®-Scale 451	Inhibitor for mineral scale problems, such as calcium oxalate, calcium carbonate.
Synthro®-Scale 287	Cleaning agent to dissolve organic compounds.
Synthro®-Scale BaDs	Boil out chemical for mineral deposits (calcium oxalate, barium sulphate...)





VIRGIN & DE-INKED PULP

SMELL INHIBITORS

Synthro®-Stab HE N Inhibitor of smell coming from hexanal. DTPA free.

Synthro®-Stab HE Inhibitor of smell coming from hexanal.

PITCH CONTROL

Synthro®-Pon H-PE Hydrophilic pitch dispersion by passivation.

Synthro®-Cat 563 Cationic polymer for fixing anionic substances.

Synthro®-Cat 622 Formaldehyde free cationic agent.

Synthro®-Pas 420 Cationic hydrophobic polymer for treatment of pitches by passivation.

Synthro®-Pas 445 Non-ionic hydrophobic polymer for treatment of pitches by passivation.

Synthro®-Spers 747 Anionic dispersant to avoid problems of pitches deposits.

ANTIFOAMS

Moussex® 7141 HL-V VOC-free vegetable oil defoamer, based on renewable raw materials.

Moussex® 9138 SE Silicone based antifoam with an excellent stability at high temperature towards alkalis and acids as well as in presence of electrolytes.

WET END

ANIONIC TRASH CONTROL

Synthro®-Pon PW	Biodegradable non-ionic wetting and dispersing agent with the property of dissolving organic deposits. BFR, FDA and Ecolabel approval. APEO free.
Synthro®-Cat 563	Cationic polymer for fixing anionic substances. Formaldehyde free.
Synthro®-Cat 622	Formaldehyde free cationic agent.
Synthro®-Pas 420	Cationic hydrophobic polymer for treatment of pitches by passivation.
Synthro®-Pas 445	Non-ionic hydrophobic polymer for treatment of pitches by passivation.
Synthro®-Pon H-PE	The only product that allows the envelopment of anionic trash in recycled process waters.
Synthro®-Spense 747	Anionic dispersant to avoid problems of pitches deposits.

WIRE AND FELT TREATMENTS

Synthro®-Pon H-PE	Avoids fabric and wire occlusions due to stickies deposits by envelopment of fabric filaments.
Synthro®-Pon WPT	Formaldehyde free cationic polymer to solve problems related to stickies and pitches.
Synthro®-Pon WPT 1	Highly cationic formaldehyde free polymer to solve problems related to stickies and pitches.



FIXING AGENTS

Synthro®-Fix WF	Cationic polymer for fixing anionic pigments.
Synthro®-Fix FF 335	Formaldehyde-free dye fixing agent.
Synthro®-Fix GRD	Formaldehyde-free dye fixing agent for direct and reactive dyes.

SOFTENER

Prox®-Amine NE 9198 HL	FDA/Bfr hydrophilic softener for tissue and paper, concentrated at 100%, VOC free. High softness without mechanical property reduction.
Prox®-Amine NE 9199 BL	Bi-component FDA/Bfr hydrophilic, for tissue and paper, concentrated at 100%, VOC free. High softness without mechanical property reduction.

FLAME PROOF AGENTS

Synthro®-Nyl ATH 15	Mineral, halogen-free, VOC-free agent, with an endothermic behavior. It could be used for food contact papers.
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ANTIFOAMS

Moussex® 7141 HL-V	VOC-free vegetable oil defoamer, based on renewable raw materials.
Moussex® 7143 HE-V	VOC-free vegetable oil emulsion defoamer, based on renewable raw materials.
Moussex® 9032 CL	Polymer based oil defoamer.

SIZE PRESS

FLAME PROOF AGENTS

Synthro®-Nyl NSP 917 S	Colorless product, especially for white paper. Efficient at low dosage levels, low effect on mechanical properties.
Synthro®-Nyl NSP 919 S	Excellent penetration in the paper sheet for high speed production. Effective first of all for colored paper and board.
Synthro®-Nyl SNP 1813 S	Organo-mineral formulation.
Synthro®-Nyl PN 2116 S	Organic non-corrosive product, suitable for inside applications.
Synthro®-Nyl NS 2017 S	Fire-proofing agent developed for cellulosic materials (paper, cardboard, wood).
Synthro®-Nyl PN 2313 S	Non corrosive and excellent penetration in paper or board.
Synthro®-Nyl NP 2720 S	Organic non-corrosive agent.

BARRIER PRODUCTS

Synthro®-Pel 164 RS	Anionic wax free, with good water proof properties and no or low effects on printability.
Synthro®-Pel B 67	Fluoropolymer free, high-performance as water, oil and grease barrier. Sealable product.
Synthro®-Pel FB 494	High performance water, oil, grease and vapor barrier polymer, with a good resistance to folding. Sealable product.
Synthro®-Pel CWO	Anionic fluorine resin free waterproof and greaseproof coating agent, with good abrasion resistance properties. Sealable product.
Synthro®-Pel PAL	Excellent anionic water proofing effect for paper and non-woven products.
Synthro®-Pel WA 491	Vapor barrier agent approved for use in food contact paper and board grades. Sealable product.
Synthro®-Pel XF	Cationic reactive water repellent, may also be used as an extender for fluorinated resins.



INSOLUBILISING AGENTS

Prox® M 3 M LF	Melamine based cross linker with low formaldehyde content (no CMR).
Synthro Cat 673	Catalyst for melamine formaldehyde resins, compliant for food contact applications.
Prox® HP-U Conc.	Accelerator and hardener for waterborne binders.

TOUCH SURFACE MODIFIER

Synthro®-Wax PE-L 300 D	Cationic PE based emulsion with the ability to modify paper touch surface.
Synthro®-Wax PE-L 304 D	Gives very soft handle and slight slip properties when used as a surface treatment. Avoids blocking and sticking in latex rich impregnation and surface treatments.
Synthro®-Wax PE-L 305 D	Gives slight slip properties when used as a surface treatment. Avoids blocking and sticking in latex rich impregnations and surface treatments
Synthro®-Wax PE-H 306 D	Non-ionic polyethylene emulsion, excellent abrasion resistance, lubricating and high softening power.
Synthro®-Wax N-C 402 D	Non-ionic carnauba wax emulsion.
Synthro®-Wax N-M 403 D	Non-ionic montan wax emulsion.

FORMALDEHYDE ABSORPTION

Synthro®-Stab TF 278	Formaldehyde and acetaldehyde scavenger.
Synthro®-Stab TF 501	Formaldehyde scavenger, reduces formaldehyde odors and emissions.

ANTIFOAMS

MousseX® 7141 HL-V	VOC-free vegetable oil defoamer, based on renewable raw materials.
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COATINGS

BARRIER PRODUCTS

Synthro®-Pel 164 RS	Anionic wax free, with good water proof properties and no or low effect on printability. Suitable to be used for ink jet paper due to its high compatibility to silica.
Synthro®-Pel B 67	Fluoropolymer free, high-performance as water, oil and grease barrier. Sealable product.
Synthro®-Pel CWO	Anionic fluorine resin free waterproof and greaseproof coating agent, with good abrasion resistance properties. Sealable product.
Synthro®-Pel FB 494	High performance water, oil, grease and vapor barrier polymer, with a good resistance to folding. Sealable product.
Synthro®-Pel PAL	Excellent anionic water proofing effect for paper and non-woven products.
Synthro®-Pel WA 491	Vapor barrier agent approved for use in food contact paper and board grades. Sealable product.
Synthro®-Pel XF	Cationic reactive water repellent, may also be used as an extender for fluorinated resins.

RELEASE AGENT

Synthro®-Pel SCR 38	Chromium complex with excellent release properties, no need of catalyzes and good printability.
Synthro®-Stab 808	pH-buffer, stabilizer of acid Chromium (iii) complex.

SLIP EASY

Synthro®-Wax PE-L 304 D	Polyethylene emulsion with lubricant property.
Synthro®-Wax PE-L 305 D	Gives slight slip properties when used as a surface treatment. Avoids blocking and sticking in latex rich impregnation and surface treatments. Can replace calcium stearate.
Synthro®-Wax PE-H 306 D	Non-ionic polyethylene emulsion, excellent abrasion resistance, lubricating and high softening power.

RHEOLOGY MODIFIER

Synthro®-Vis TPC 38	Thickener and water retention agent, with high water retention properties.
Synthro®-Vis FA 365 Conc.	Flow agent improving surface properties as gloss, defects and streaks.



CROSS-LINKERS

Prox® EB 9913 C	Aqueous emulsion epoxy resin with a very high molecular weight; very high alkali resistance.
Prox® H-PU Conc.	Accelerator and hardener for waterborne binders.
Prox® M 3 M LF	Melamine based cross linker with low formaldehyde content (no CMR).
Prox® R 908	Polyurethane emulsion, very effective as cross-linker for PVA.

DISPERSANT

Synthro®-Spers A 11	Product to keep pigments dispersed in slurry or in coating color.
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BINDERS

Prox® AM 185 RS	Modified acrylic resin to get the coating more rigid and resistant to high temperature.
Prox® AM 219 RG	Cationic acrylic copolymer emulsion, giving a soft film.
Prox® AM 234	Amphoteric core shell acrylic emulsion.
Prox® AM 270 R	Cationic acrylic copolymer emulsion, giving a hard film.
Prox® EB 9913 C	Aqueous emulsion of solid epoxy resin with a very high molecular weight, giving very high alkali resistance.
Prox® R 908	Polyurethane emulsion giving greaseproof, waterproof and good abrasion resistance.

FLAME PROOF AGENTS

Synthro®-Nyl ATH 15	Mineral, halogen-free, VOC-free agent, with an endothermic behavior. It could be used for food contact papers.
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ANTIFOAMS

Moussex® 7141 HL-V	VOC-free vegetable oil defoamer, based on renewable raw materials.
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MEMBER OF PROTEX INTERNATIONAL

WORLDWIDE MAIN IMPLANTATIONS

AMERICA

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USA - MACE POLYMERS & ADDITIVES Inc.
USA - NORTHERN SPECIALITY CHEMICALS Inc.
Brazil - PROX DO BRAZIL

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