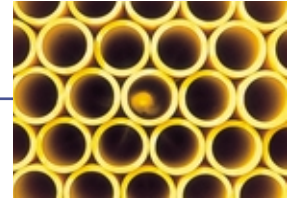




▶ CONTENTS



▶ PRESENTATION



Markets & Activities

ATOFINA AT A GLANCE

ATOFINA, the Chemicals branch of the TotalFinaElf Oil Group, was created in April 2000 from the merger of the chemical and petrochemical activities of TotalFina and Elf Aquitaine.

With 71,300 employees and sales of € 19,3 bn in 2002, ATOFINA is one of the major chemical companies in the World.

ATOFINA's Chemicals enjoy leading positions both in Europe and in the World in each of the Company's three core activities:

- Base chemicals and Commodity polymers: Olefins, Aromatics, Polyethylene, Polypropylene, Styrene, Polystyrene, Elastomers, Chlorochemicals and solvents, PVC and downstream, Fertilizers.
- Intermediates and Performance polymers: Acrylics PMMA, Fluorochemicals and Peroxides, Thiochemicals and Fine chemicals, Performance products, Additives, Engineering polymers, Formaldehyde resins, Agrochemicals.
- Specialties: Rubber-based products (Hutchinson - Mapa Spontex), Adhesives (Bostik Findley), Resins including photocure resins (Cray Valley, Sartomer, Cook Composites & Polymers), and Electroplating (Atotech).

With operations on all five continents, particularly in Europe, North America and Asia, ATOFINA is the dedicated partner to many industrial sectors in diverse markets ranging from automotive and transport, packaging, construction and civil engineering, to sports and leisure, hygiene-health and beauty, water, paper, electronics, agriculture, etc.






CONTENTS

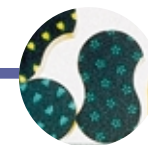










■ ACTIVITIES



	Base chemicals and Commodity polymers	2
	- Olefins, Aromatics and Polyolefins	2
	- Styrene, Polystyrene and Elastomers	2
	- Chlorochemicals, PVC and downstream PVC	3
	- Fertilisers	4
	Intermediates and Performance polymers	5
	- Fluorochemicals and Oxygenated products	5
	- Acrylics and Organic products	5
	- Thiochemicals and Fine chemicals	6
	- Organic peroxides	6
	- Performance products	7
	- Engineering and Functional polymers	8
	- Aminoplaste, Formaldehyde and Melamine resins	10
	- Agrochemicals	10
	Specialties	11
	- Rubber and Elastomer processing (Hutchinson)	11
	- Resins (Cray Valley, Sartomer, Cook Composites & Polymers)	12
	- Adhesives (Bostik Findley)	13
	- Electroplating (Atotech)	14

■ MARKETS



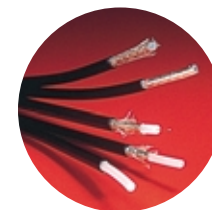
	Automotive - Transport	15
	Packaging	18
	Construction and Civil engineering	20
	Hygiene, Health and Beauty	22
	Water	24
	Sports and Leisure	26
	Agriculture	27
	Consumer goods	28



OLEFINS, AROMATICS AND POLYOLEFINS

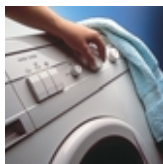


	Products	Main applications
OLEFINS AND AROMATICS	- Ethylene, propylene, butadiene, benzene, toluene, xylenes, cyclohexane	- petrochemicals, plastics, rubber, plasticisers, paints, solvents, etc.
POLYOLEFINS	- Polyethylene (Lacqtene®, Finathene®, Finacene®), polypropylene (Atofina PP), low content ethylene and vinyl acetate copolymers - PP compounds (Finalloy®)	- construction (cables, pipes and fittings), automotive, leisure, industrial and commercial packaging film, agricultural film, etc. - automotive

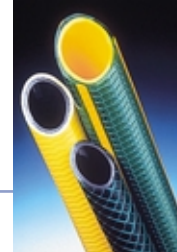


STYRENE, POLYSTYRENE AND ELASTOMERS

	Products	Main applications
	- Ethylbenzene, styrene, crystal and impact polystyrene, polystyrene compounds (Lacqrene®, Fina®) - Elastomers (Finaprene®, Finaclear®, Finaflex®)	- packaging, audio-video, household electrical, housing, construction and public works, electricity, telephony, office equipment - construction and public works (bitumen, roofing), footwear, adhesives, plastics processing and converting



■ CHLORO CHEMICALS, PVC AND DOWNSTREAM PVC



	Products	Main applications
CHLORINE, SODA	<ul style="list-style-type: none"> - Chlorine, soda, hydrogen, hydrochloric acid, sodium hypochlorite (bleach) 	<ul style="list-style-type: none"> - water treatment, pharmaceuticals, agriculture, paper, textile, detergents, glass, food production and processing, fine chemicals, phytopharmaceuticals, hygiene, fuel, alumina industry
CHLORO CHEMICALS	<ul style="list-style-type: none"> - Monochloroacetic acid (MCAA), sodium monochloroacetate (SMC) - Aluminium chloride - Flocculants and coagulants (Wac[®], Alba[®], Clarfer[®]), sodium chlorite - Chlorinated derivatives of cyanuric acid (Surchlor, Oniachlor[®], Miami) - Thermal fluids (Jarytherm[®], Jarylec[®]) 	<ul style="list-style-type: none"> - pharmaceuticals, surfactants, PVC stabilisers, etc. - catalysts - water treatment (drinking water, industrial water and effluents), paper, textile (bleaching) - treatment of swimming pool water - chemical industry, condensers
SOLVENTS	<ul style="list-style-type: none"> - Chlorinated solvents: trichloroethylene (Altène[®]), trichloroethane 111 (Baltane[®]), perchloroethylene (Pertène[®]), methylene chloride (Uklène), methyl chloride, chloroform - Oxygenated solvents (DA, MIBK, MIBC, isophorone, H6, MEK, etc.) 	<ul style="list-style-type: none"> - industrial, automotive and aerospace surface treatment, glues and adhesives, paints, varnishes, inks, degreasing, dry cleaning, paint stripping, HFA intermediates, etc. - paints, varnishes, inks, adhesives, pharmaceuticals, perfume manufacture, degreasing and paint-stripping formulations
VINYL CHLORIDE AND POLYVINYL CHLORIDE	<ul style="list-style-type: none"> - VCM (vinyl chloride monomer) - General and special purpose PVC (Lacovyl[®]) - Chlorinated PVC (Lucalor[®]) 	<ul style="list-style-type: none"> - raw material for PVC - construction and public works, packaging, automotive, medical, cable, housing, sports and leisure, etc. - construction and public works (pipes, fittings, etc.), chemical engineering, thermolactyl fibres, etc.
VINYL THERMOPLASTICS	<ul style="list-style-type: none"> - Plasticised and rigid PVC compounds (Nakan[®], Dorlyl[®]), thermoplastic elastomers (Sunprene[®]), specialty vinyl compounds (Sunfrost[®], Nakan[®]-S, Nakan[®] Drysol) 	<ul style="list-style-type: none"> - cable, construction and public works, automotive, medical, bottles, packaging, vinyl records, etc.
PVC PIPES AND FITTINGS, PROFILES	<ul style="list-style-type: none"> - PVC pipes and fittings (Alphacan[®]), profiles 	<ul style="list-style-type: none"> - construction and public works, agriculture, electricity, telephony (pipes, windows, doors and frames, roller shutters), sound and thermal insulation, etc.

Base chemicals and Commodity polymers



CONTENTS



■ FERTILISERS

	Products	Main applications
NITROGEN DERIVATIVES	<ul style="list-style-type: none"> - Nitrogen fertilisers, compound fertilisers, ammonium nitrates, urea (Tonigam®, Lika®, Nutriforce®) - Ammonia, ammonia water, nitric acid, urea, ammonium nitrate solution, technical grade ammonium nitrate 	<ul style="list-style-type: none"> - agriculture (soil fertilisation) - industrial applications
PHYTOSANITARY PRODUCTS AND FERTILISERS	<ul style="list-style-type: none"> - Phosphate fertilisers - Sulphuric acid, oleum 	<ul style="list-style-type: none"> - agriculture (soil fertilisation) - industrial applications





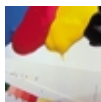
■ FLUOROCHEMICALS AND OXYGENATED PRODUCTS

	Products	Main applications
FLUOROCHEMICALS	<ul style="list-style-type: none"> - Mineral fluorochemicals, BF_3 - Hydrofluoroalkanes - HFA - (Forane[®]), HFC, HCFC - Fluorinated solvents (Forane[®]) 	<ul style="list-style-type: none"> - catalysts, additives - plastic foam, refrigeration, air-conditioning - cleaning of mechanical, electrical and electronic parts
OXYGENATED PRODUCTS	<ul style="list-style-type: none"> - Hydrogen peroxide (Albone[®], Peroxal[®], Valsterane[®]) - Chlorate and sodium perchlorate - Hydrazine and derivatives: hydrazine hydrate (Liozan[®]), azodicarbonamide (Azobul[®]), aminotriazole, 1,2,4-triazole, azobisisobutyronitrile (AZDN) 	<ul style="list-style-type: none"> - paper pulp, textile, water treatment, disinfectant - paper pulp, weedkiller, rocket fuel, batteries, pyrotechnics, electrometallurgy, etc. - rocket fuel, water treatment, pharmaceuticals and agrochemicals synthesis, blowing agent for plastics, herbicide and fungicide, polymerisation initiator, etc.



■ ACRYLICS AND ORGANIC PRODUCTS

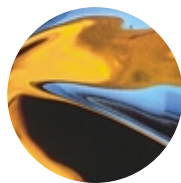
	Products	Main applications
ACRYLICS AND DERIVATIVES	<ul style="list-style-type: none"> - Norsocryl[®] acrylic and methacrylic monomers : acrylic acid and acrylic esters, specialty acrylic monomers (Adame[®], Madame[®], Adamquat[®], Madquat[®]) - Methacrylic acid and methyl methacrylate (MMA) - Superabsorbent polymers (Aqua Keep, Norsocryl[®]) 	<ul style="list-style-type: none"> - superabsorbents, flocculants, detergents, paints, varnishes, inks, leather, textile, glues and adhesives, paper, waxes, plastics, resins, synthetic rubber, acrylic fibres, water treatment, petroleum additives, etc. - PMMA monomer, organic synthesis, paints, varnishes, inks, paper, leather, textile, etc. - hygiene, industrial applications
ORGANIC PRODUCTS	<ul style="list-style-type: none"> - Diacids - Oxo alcohols - Phthalates (Garbeflex[®]) 	<ul style="list-style-type: none"> - paints, varnishes, automotive, boats, construction, food industry, etc. - paints, pharmaceuticals, lubricants, plasticisers, chemicals - plasticisers, cable, paints, inks, medical



THIOCHEMICALS AND FINE CHEMICALS



	Products	Main applications
THIOCHEMICALS (Sulphur derivatives)	<ul style="list-style-type: none"> - Mercaptans - Sulphides and polysulphides (TPS[®], Vultac[®], Spotleak[®], Vigileak[®], DMDS, Careflex[®]) - Sulfonyls - Dimethylsulfoxide (DMSO) - Thioacids and esters - Thiochemicals (Ekaland[®], Mixland[®]) 	<ul style="list-style-type: none"> - animal feed, pesticides, radical polymerisation - oil industry, natural gas odourisation, petrochemicals, lubricant additives, rubber additives - electroplating, pharmaceuticals, agrochemicals - synthesis solvent (pharmaceuticals, agrochemicals, fine chemicals) and formulation solvent (paint stripping, inks, microelectronics, agrochemicals, pharmaceuticals, etc.) - PVC stabilisers, pharmaceuticals, agrochemicals, glass, electroplating, aluminium, etc. - rubber additives, rubber accelerator, antioxidants, blowing agents, intermediates for phytosanitary specialties
FINE CHEMICALS	<ul style="list-style-type: none"> - Acroleine - Bromochemicals: methyl bromide (Sobrom[®], Fumyl-O-Gas[®]), hydrobromic acid, boron tribromide, alkyl bromide, bromoacids and esters - Amines 	<ul style="list-style-type: none"> - animal feed - agriculture, phytosanitary products, fine chemicals, pharmaceuticals, perfume manufacture, colorants, etc. - synthesis for medicinal products, surfactants, phytosanitary products



ORGANIC PEROXIDES

	Products	Main applications
	<ul style="list-style-type: none"> - Organic peroxides Luperox[®] 	<ul style="list-style-type: none"> - polymerisation initiator for plastics, rubber and PE crosslinking, unsaturated PS resin curing



■ PERFORMANCE PRODUCTS



Products

Main applications

SURFACTANTS AND INTERFACE AGENTS

- Fatty amines and derivatives (Noxamium®, Prochinor®, Amphoram U®)
- Emulsifiers and adhesion agents (Noram®, Dinoram®, Polyram®, Stabiram®)
- Oil and gas production additives (Norust®, Prochinor®, Bactiram®)
- Resins (UF phenolic, ME, polyamides, epichlorhydrin (Cecamid®))
- Rubber additives (Ribetak®, Ribeno1®)
- Phosphorous specialties

- textile softener base, road bitumen emulsifiers, fertilisers, fuel detergents, oil and gas industries, polymer additives, cosmetics bases and parapharmaceuticals, etc.
- paper treatment and binding of mineral fibres
- tyre and rubber manufacture
- chemical nickel-plating, electronics

ADSORBENTS AND FILTER AIDS

- Molecular sieves (Siliporite®)
- Activated carbon (Acticarbone®)
- Filter aid, insulation product and absorbent fillers (Clarcel®, Clar-O-Cel®, Clarcel-Flo, Cecaperl®, Porosil); bentonite and attapulgit (Clarsol®, Cecatherm)

- construction (double-glazing), packaging of moisture-sensitive products, paints, plastics, chemical manufacture, natural gas and industrial gas production, oil industry, etc.
- drinking water treatment, oil, mining, pharmaceuticals, fine chemicals, food production and processing, protection of the environment
- food production and processing, oil, pharmaceuticals, chemicals, cryogenic insulation of land-based tanks and ocean tankers, construction and public works, foundry work, etc.

CATALYSTS

- Organo-tin (Fascat®)
- Organo-phosphorous products (triphenylphosphine)
- Antimony derivatives (S21, S24)

- catalysts for esterification, transesterification reactions, alkyd, polyurethane, silicone resins, etc.
- catalyst for oxo alcohol synthesis, raw material for fine chemicals, pharmaceuticals, agrochemicals, raw material for phosphonium salt synthesis
- catalyst for PET



■ PERFORMANCE PRODUCTS



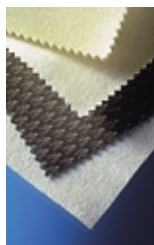
	Products	Main applications
SURFACE TREATMENT	- Glass coating (Certincoat®, Tegoglas®), treatment of marine surfaces (Biomet®)	- scratch-resistance for bottles, low emissivity floatline coatings for sheet glass, anti-fouling agents for marine paints
PLASTIC ADDITIVES	- Plastic additives (Thermolite®, Stavivor®, EcepoX®, Vikoflex®, Durastrength®, Plastistrength®, Clearstrength®, Azobul®, Acryperl®)	- stabilisers and metallic soaps for PVC, PE, PP, PS, impact modifiers, process aids for PVC and engineering plastics, blowing agents
AGROCHEMICALS	- Pre-harvest specialties (Cuprofix®, Penncozeb®, Trimanoc®, Topsin®, Penncap M®, Knox-out®, Desicate®, Bouillie Bordelaise RSR Disperss®, Microthiol Spécial Disperss®) - Post-harvest specialties (Decco®) - Aquatic algicides and herbicides (Aquathol®, Hydrothol®)	- fungicides, insecticides, defoliants, dessicants - washing of fruits, protective waxes, fungicides, stabilisers, preservatives - algicides, selective lawn weedkillers



■ ENGINEERING AND FUNCTIONAL POLYMERS



	Products	Main applications
MONOMERS	- Norbornène, VF ₂ , amino-11 undecanoic acid, lactame 12,	- specialty copolymers
POLYAMIDES	- Polyamides 11 and 12 (Rilsan®) - Heatseal copolyamides (Platamid®, Platherm®, Plathen®) - Polyether block amides (Pebax®) - Thermoplastic alloys (Orgalloy®) - Semi-aromatic polyamides (Cristamid®)	- automotive, precision engineering, electric, oil, pneumatic, hydraulic, aerospace industries, etc. - textile, automotive, hygiene-health, sports and leisure, industrial equipment, etc. - antistatic additives, sports, leisure, spectacles, automotive, machine-tools, electricity, electronics, adhesives, various coatings, hotmelts, etc. - automotive, household electrical, electrical engineering, sports, tools, industrial and food packaging - fashion, medical, automotive, packaging, water treatment, milk and beer processing, etc.



ENGINEERING AND FUNCTIONAL POLYMERS



	Products	Main applications
FLUORINATED POLYMERS	<ul style="list-style-type: none"> - Polyvinylidene fluoride (Kynar®) - Polytrifluorochloroethylene (Vortalef®) 	<ul style="list-style-type: none"> - anti-corrosion for chemical engineering and petrochemical industry, food production and processing, electric and electronic cables, architectural coatings, automotive (fuel lines), coatings and industrial film - refrigeration industry (chemical engineering, cryogenics, liquid oxygen, medical and laboratory equipment)
POLYNORBORNENE	<ul style="list-style-type: none"> - Norsorex® 	<ul style="list-style-type: none"> - anti-pollution agent (gelling agent and absorbent) for hydrocarbons
POLYMETHYL METHACRYLATE (PMMA)	<ul style="list-style-type: none"> - Altuglas® and Plexiglas® sheets and granules 	<ul style="list-style-type: none"> - automotive, construction, advertising, electronics, sign manufacture, optics, medical
CASTOR OIL DERIVATIVES	<ul style="list-style-type: none"> - Glycerin, heptanal-heptanol, methyl undecylenate, undecylenic acid 	<ul style="list-style-type: none"> - soap, deodorants, perfume and fragrances, antibiotics, cosmetics, odour absorbers
MODIFIED POLYOLEFINS	<ul style="list-style-type: none"> - EVA (Evatane®), EDA, EBA (Lotryl®) and EVOH (Soarnol®) ethylene copolymers - Coextrusion (interply) binders / tie layers (Orevac®, Lotader®) 	<ul style="list-style-type: none"> - glues and adhesives, cables, hotmelts, heatsealing films, agricultural films, rubber films, deepfreezing, flexible hoses, food packaging - multilayer packaging, heatsealing films, pipeline protection, etc.
FINE POWDERS	<ul style="list-style-type: none"> - Ultrafine polyamide powders (Orgasol®) - Thermoplastic polyamide fine coating powders (Rilsan®) 	<ul style="list-style-type: none"> - cosmetics, pharmaceuticals, vitamin support, paint and varnish additives - automotive, construction and public works, printing, pipes, etc.
COMPOSITES	<ul style="list-style-type: none"> - Glassfibre-reinforced polypropylene (Pryltex®) 	<ul style="list-style-type: none"> - automotive (engine crankcase, bumper beam)



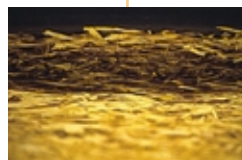
■ AMINOPLASTE, FORMALDEHYDE AND MELAMINE RESINS

Products

- Urea-formaldehyde resins, urea-formaldehyde melamine, urea-phenol-formaldehyde melamine, formaldehyde melamine (Pressamine®, Caurite, Leuna Leim)
- Formaldehyde
- Melamine

Main applications

- wood-based panels (furnishing, construction), laminated floor coverings
- intermediate for resins, disinfection, pharmaceuticals



■ AGROCHEMICALS

Products

PLANT PROTECTION SPECIALTIES AND FERTILISERS
(Chlorochemicals, bromochemicals, agrochemicals, etc.)

- Biosuper®
- Penncap® M insecticides (Végépron® DS, Clairsol® 85, Amok®, K par K®, Melkior®), herbicides, dithiocarbamate fungicides (Granéor® 75, Trimanoc®, Pennfluid®, Vondolfo®), copper-based fungicides (Bouillie Bordelaise RSR Dispers®, Cuprofix®), sulphur-based fungicides (Microthiol Spécial Dispers®, Fluidosoufre®)
- Waxes, detergents, fungicides Decco®
- EcoModules®
- Dispers®

Main applications

- hygiene product for treating soil and bedding in live-stock buildings
- pre-harvest crop protection
- post-harvest protection of fruits and vegetables
- micro-encapsulation technique
- granulation technique



RUBBER AND ELASTOMER PROCESSING (HUTCHINSON)



Products

Main applications

AUTOMOTIVE

- Door and window seals, guide rails, glass run channels, encapsulated window seals, etc.
- Hoses for water, fuel, air, flexibles for air-conditioning, power steering, hydraulic brakes and clutch
- Belts (Poly-V®, Polycran®), tensioners and pulleys
- Front and rear bumpers, front and rear spoilers, running boards, bull-bars, etc.
- Elastic couplings, shock absorber support, elastic and hydroelastic joints (Artifluid®), elastic and hydroelastic supports (Strafluid®), active engine mounts (AVA 1, 2, 3®), exhaust hangers

- bodywork sealing systems
- transfer of low and high pressure fluids
- transmission
- bodywork parts
- antivibration systems

INDUSTRY (Aerospace, rail, construction, defence)

- Laminated parts for helicopter rotors, aircraft engine mount, rail bogie suspension
- Seals for aircraft fuselage and wings, profiles for glazing, precision seals for aircraft engines
- Flexible and rigid pipes for hydraulic systems, hose clips and clamps
- Illuminated front panel for aircraft cockpit, rail travel information system, aircraft control unit

- antivibration
- sealing systems
- fluid transfer
- display equipment

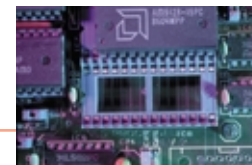
CONSUMER GOODS (Hygiene, leisure, babycare, health, sports)

- Cleaning accessories (Mapa®, Spontex®)
- Babycare products (Nuk®, Tigex®, Vital System®) and healthcare products
- Chemical protection gloves
- Tyres

- household gloves, gardening gloves, DIY gloves, cleaning cloths, household sponges, scouring sponges, stainless steel spiral hoses, etc.
- babies' bottles, teats, pacifiers, nursery toys, products for sterilisation, condoms
- protective work equipment
- bicycle tyres (Mosquito®), moped tyres, inner tubes, etc.



RESINS (CRAY VALLEY, SARTOMER, COOK COMPOSITES & POLYMERS)



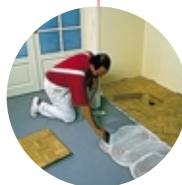
	Products	Main applications
STRUCTURAL RESINS	- Unsaturated polyesters (Enydyne®, Procore®, Norsodyne®, Synolac®), gelcoats (Polycor®, Armorcote®, Lovocor®), sealants, binders	- construction, automotive, navigation, sanitaryware, household electrical
COATING RESINS	- Crayamid®, Crayvallac®, Gelkyd®, Super Gelkyd®, Synocryl®, Synocure®, Synolac®, Unithane®, Realkyd®	- decorative paints, graphic arts, anti-corrosion coatings, industrial paints, powder paints
AROMATIC HYDROCARBON RESINS	- Norsolène L®, Norsolène S®, Norsolène 9000®, Norsolène I®, Norsolène M®, Norsolène A®, Norsolène W®	- manufacture of printing inks, pigment pastes, coatings, adhesives and rubber
PHOTOCURE RESINS AND FUNCTIONAL ADDITIVES	- SMA®, POLY BD®, Craynor®, M-Cure, P-Cure, Sarbox®, Saret®, Sar-Gel®, Sartomer®	- electronics, fibre optics, graphic arts, leisure goods, packaging, wood, paper, textile and leather industries, rubber processing, industrial coatings, sealants, glues and adhesives
COLOPHONY RESINS	- Reactal®, Tergraf®, Tergum®, Terpenato®, Tertac®, Terfenol®	- graphic arts, adhesives, paints, varnishes, household electrical, automotive accessories, electrical equipment, cosmetic industry
POWDER RESINS	- Reafree®	- household electrical, automotive accessories, electrical equipment
EMULSIONS	- Craymul®, Repolem	- industrial and decorative paints, inks, leather, textile, paper and floor coverings



■ ADHESIVES (BOSTIK FINDLEY)



	Products	Main applications
CONSTRUCTION	<ul style="list-style-type: none"> - Glues, sealants and coatings (Bostik®, Mang®, Miplacol®, Quelyd®, Sader®, Roxol®, Tarbicol®) - Ardal® glues - Resins (Colflex®, Novaflex®) - Structural glues - Injection resins and reactive mortars for sealing and waterproofing (Araldite®) 	<ul style="list-style-type: none"> - laying of floor and wall coverings, sound and heat insulation, various materials - tiling - industrial flooring - concrete and steel
DIY / HOME IMPROVEMENT	<ul style="list-style-type: none"> - Glues, sealants and coatings (Araldite®, Bostik®, Evo-Stick®, Sader®, Pâte à coller, Quelyd®, Sak-mix®, SB Mercier®) 	<ul style="list-style-type: none"> - DIY/home improvement and decoration
INDUSTRY	<ul style="list-style-type: none"> - Glues, sealants and coatings (Alfo®, Bostik®, Colflex®, Enocol®, Freemelt®, Nipweld®, Subo®, Thermelt®, Thermoresol®, Topfix®, Vinylone®) - Assembly glues - Adhesives for disposable nonwovens (Lora®, Securance®) 	<ul style="list-style-type: none"> - packaging industry, paper and cardboard processing - car and automotive equipment manufacture, electricity, household electrical, corks, bookbinding, envelope manufacture, wood, furniture, joinery and timber, marine and textile - hygiene articles, babies' nappies



■ ELECTROPLATING (ATOTECH)



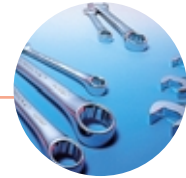
Products

Main applications

INDUSTRY

- Functional and decorative general metal finishing (Futuron, Heef, Cupracid), electronic products (Seleo CP, Stannatech, Uniplate)

- copper-, chromium- and nickel-plating, in particular for electronic, mechanical and automotive parts, chemical plating of metals





AUTOMOTIVE



Products

Main applications

COMMODITY PLASTICS

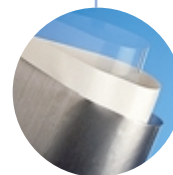
- Finathene® high density polyethylene
- Atofina PP polypropylene, PP compounds (Finalloy®)
- Lacovyl® polyvinyl chloride
- PVC compounds (Nakan®, Nakan® Drysol, Nakan®-S, Sunfrost®) and elastomers (Sunprene®)

- fuel tank, windscreen washer reservoir, brake fluid reservoir, air lines
- bumper, dashboard, door panels, door stowage compartments, joinery, side protection trim, carpets and seat upholstery
- coated fabrics, anti-gravel coatings
- coated fabrics for dashboard, interior fittings, decorative profiles, sealing gaskets, fuel line sheathing, encapsulation

ENGINEERING PLASTICS

- Rilsan® polyamides 11 and 12
- Rilsan® polyamide coating powders
- Pebax® polyether block amides
- Orgalloy® thermoplastic alloys
- Altuglas® and Plexiglas® PMMA
- Kynar® PVDF
- Pryltex® fibreglass-reinforced polypropylene
- Lotryl®, Lotader® terpolymers and copolymers

- fluid transfer pipes, fittings and connections, pipes for fuel pumps, brake lines, mechanical parts
- coating of mechanical parts, sliding door rails, splined drive shaft, steering column
- small interior fittings
- engine air inlet pipes, fans, connectors
- lights (rear lights and indicator lights), dashboard glazing, number plates, exterior trim, glazing
- bodywork decorative films, high temperature cables, fluid transfer pipes
- battery tank mountings, under-engine fittings, bumper beams
- cable, sound insulation systems





AUTOMOTIVE



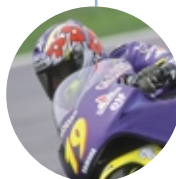
	Products	Main applications
ADHESIVES AND BINDERS	<ul style="list-style-type: none"> - Topfix[®], Evo-stik[®], Aquagrip[®], Supergrip[®] polyurethane and epoxy glues - Platamid[®], Platherm[®] hotmelts - Adheflon[®], Soarmol[®], Orevac[®] binders 	<ul style="list-style-type: none"> - bonding of plastic bodywork components - bonding of interior fittings (roof panels) - multilayer fuel lines, multilayer fuel tanks
ADDITIVES AND CHEMICALS	<ul style="list-style-type: none"> - POLY BD[®] resins - MLPC range of adhesives and Ribetak[®] resins - Forane[®] HCFC, HFC - Cecavon[®] mould-release agents - Acticarbon[®] activated carbon 	<ul style="list-style-type: none"> - sealing of metal fittings, bonding of lights, leak-tight joints - additives for rubber and glues - refrigerant air-conditioning fluids, foam blowing agent - treatment of the air in air-conditioning circuit, canister
RUBBER AND ELASTOMERS	<ul style="list-style-type: none"> - Paulstra[®] antivibration - Hutchinson[®] transmission - Hutchinson[®], Le Joint Français[®], Paulstra[®], Catelsa[®], Cesari[®], Pamargan[®], etc., bodywork seals and precision seals - Hutchinson[®] body parts - Ribetak[®] 	<ul style="list-style-type: none"> - steering coupling and drive shaft coupling, shock absorber support, elastic suspension joints, body mounts, engine mounts, exhaust hangers - Poly-V[®] and Polycran[®] belts, uncoupling pulleys, line tensioners - window sealing strips, body seals, door seals, window run channels, joints for housing, bearing, shock absorber, radiator, brake caliper, O-rings, automatic gearbox pistons, dust guards, ball joint covers, sealants for fixed windows, sealants and adhesives for brake assembly and bonding, lights, roof, door panels, boot, bonnet, etc. - spoilers, rocker panel trims, radiator grille, front and rear bumpers, door trim, front and rear fenders - additive for tyres / rubber





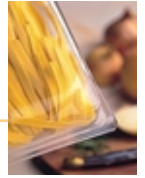
TRANSPORTS

	Products	Main applications
PLASTICS	<ul style="list-style-type: none">- PMMA: Altuglas®, Plexiglas®	<ul style="list-style-type: none">- windscreens for motorcycles and boats, sun visors, spoilers
SURFACE TREATMENT	<ul style="list-style-type: none">- Chromium-plating of metals and plastics- Specialty chemical and electrolytic processes for printed circuit board manufacture- Gelcoats Armorcote®, Polycor®- Corrosil, Heef 25, Futuron, Trichrome+ processes	<ul style="list-style-type: none">- engine segments and locomotive engine bolts, fittings for trains- ABS, airbags, electric seats- surface finishing for polyester structural parts- anti-corrosion treatment, wear-resistance, metal-plating of plastics, decorative chromium-plating
INSULATION	<ul style="list-style-type: none">- Cecaperl®	<ul style="list-style-type: none">- cryogenic insulation (ocean tankers)
STRUCTURAL RESINS	<ul style="list-style-type: none">- Enydyne®, Norsodyne®, Synolac®, Stypol®, Procore® unsaturated and hybrid polyester resins	<ul style="list-style-type: none">- resins for structural parts in engine compartment, and aesthetic components for small and medium series production
ADDITIVES AND CHEMICALS	<ul style="list-style-type: none">- Hydrazine hydrate- Performance additive: aluminium nitride, organo-metallic precursors	<ul style="list-style-type: none">- liquid fuel for rockets- boxes for power electronics for aerospace, for composites with ceramic matrix





PACKAGING



Products

Main applications

PLASTICS

- Lacqtene®, Finathene®, Finacene® polyethylene
 - Low density polyethylene
 - High density polyethylene
- Atofina PP polypropylene
- Lacqrene® polystyrene
- SBS high styrenics (Finaclear®)
- Lacovyl® PVC
- Dorlyl®, Nakan® vinyl compounds
- Lotryl® acrylic ethylene derivative copolymers
- Ethylene copolymers: Orevac®, Lotader®, EVOH Soarnol® (oxygen-barrier material), Evatane®
- Rilsan® polyamide, Pebax® polyether block amides

- palletising and collating films (bottles of water)
- hollow vessels (milk and fruit juice bottles, detergent and shampoo bottles, toothpaste tubes, single doses for physiological saline), industrial packaging (containers)
- cosmetics (closures, tops, crates, pots, bottles), detergents (liquid detergents, window cleaning), food production and processing (bottles for fruit juice, ketchup, oil, yoghurt pots, bags for biscuits), kitchenware (pots, trays, cups, storage boxes)
- food (yoghurt pots, cups, various thermoformed and injection-moulded packaging)
- medical and food packaging, films
- bottles, clear packaging for cleaning products, packaging for pharmaceutical products, blister packs
- hollow vessels (bottles, cans), end-pieces and connections, tubes and bags for medical use, films and sheathing
- multilayer films, sealable-peelable films for sealing dairy product packaging, packs for pre-packed food
- multilayer films for food packaging
- food (sausage sleeve, sterilisation and preservation of food) and medical (catheters, syringes, bags for sterilising medical instruments), dehydration films





PACKAGING

	Products	Main applications
GLUES, ADHESIVES AND BINDERS	<ul style="list-style-type: none">- Subo® water-based labelling glues- Freemelt® hotmelts- Nipweld® polyurethane and cold seal	<ul style="list-style-type: none">- high-speed labelling, film labelling- sealing of cartons and labelling- sealing of flexible packaging (confectionery and chocolate bars)
SURFACE TREATMENT	<ul style="list-style-type: none">- Certincoat® (hot-end coating) and Tegoglas® (cold-end coating), Opticoat®- Hydrogen peroxide Valsterane®	<ul style="list-style-type: none">- protective coating for glass bottles- treatment of food-grade cartons





CONSTRUCTION AND CIVIL ENGINEERING



Products

Main applications

PLASTICS

- Lacqtene[®], Finathene[®] polyethylene
- Atofina PP polypropylene
- SBS, Finaprene[®] elastomers
- Lacqrene[®] polystyrene and PS compounds
- Lacovyl[®] PVC
- Nakan[®] PVC compounds
- Lucalor[®] chlorinated PVC
- Bipeau[®], Retube[®], Alphacan O Bleu[®] PVC and PE pipes and fittings, Lucobay[®], Celuka[®], Espace Clair[®] PVC and PE profiles, Techcell[®] foam sheeting, Rétipex[®] crosslinked polyurethane
- Rilsan[®] polyamide coating powders
- Altuglas[®] and Plexiglas[®] PMMA
- Kynar[®] 500 PVDF
- POLY BD[®] polybutadiene, Repolem, Ecoacryl[®] acrylic and vinyl emulsions, SMA[®] resins
- EPDM rubber profiles, Finaprene[®], Sunprene[®] thermoplastic polymer profiles
- Lotryl[®] EDA and Evatane[®] EVA

- waterproofing films, road signs, cable, water and gas pipes, heating and cooling floors, etc.
- woven and nonwoven textiles, garden furniture, pipes, etc.
- bitumen modification, roofing bitumen
- illuminated ceilings, switches, electric boxes, industrial sheeting for shower cubicles, insulation, etc.
- window profiles, shutters, skirting, cladding, wall and floor coverings, garden fencing, etc.
- window profiles, cladding, shutters, skirting, fencing, insulation of electric cables
- high-temperature pipes, pipes for integrated heating, etc.
- water pipes, cable sheathing, windows, joinery, interior and exterior decoration for houses, thermal and sound insulation, cables and sheathing, etc.
- anti-corrosion protection of materials, of water pipes, various parts and fittings
- lighting including street lighting, soundproofing walls, skydomes and skylights, sign manufacture, shopfitting, illuminated signs, display racks, etc.
- resin for extra durable paint
- sealing coatings, cables, bonding sealants, glues, paints, double-glazing
- sealing joints for wood, PVC and aluminium joinery
- floor coverings





CONSTRUCTION AND CIVIL ENGINEERING



	Products	Main applications
GLUES AND ADHESIVES	<ul style="list-style-type: none"> - Sader®, Quelyd®, Miplacol®, Muropack®, Ardal®, Evo-stik®, Simson®, Sovereign®, Hey'di®, Mang®, etc., professional and DIY products - Eponal® epoxy resins 	<ul style="list-style-type: none"> - glues, sealants for floor and wall coverings, sound insulation, structural glues for steel and concrete, sealants for decoration, repairs and home improvement, etc. - reinforcement of concrete
CHEMICALS	<ul style="list-style-type: none"> - Dimethylsulphoxide (DMSO) - Chlorinated solvents: Iridia® range - Forane® HFA fluorinated derivatives - Clearstrength®, Durastrength®, Plastistrength®, Stavivor®, Thermolite® plastic additives - Hydrazine derivatives Azobul® - Durastrength® acrylic impact modifiers - Maleic anhydride, oxygenated solvents - Siliporite® molecular sieves, POLY BD®, Permapol® (polysulphide) - Clarsol® bentonite and attapulgite - Sodium carbonate - Noram®, Dinoram®, Polyram®, Stabiram® emulsifiers and adhesion dopes 	<ul style="list-style-type: none"> - solvent for paint-stripping formulations - paints and varnishes - expansion of insulating foam, air-conditioning fluids, grime-resistant treatment of surfaces, walls, etc. - heat-stabilisers for PVC, impact modifiers and low-temperature process aids - blowing agent - improved PVC strength - wallpaper, paints, varnishes - moisture adsorbent for double-glazing, filler for sealant and putty, plaster, cement, etc. - clay for foundations - raw material for sheet glass - bitumen (road)
SURFACE TREATMENT	<ul style="list-style-type: none"> - Certincoat® 	<ul style="list-style-type: none"> - glass treatment (reflection of infrared rays and improved thermal insulation of buildings)

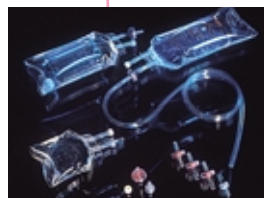




HYGIENE, HEALTH, BEAUTY



	Products	Main applications
<p>PLASTICS (Commodity plastics, engineering and functional polymers, etc.)</p>	<ul style="list-style-type: none"> - Atofina PP polypropylene, Lacqtene® Finathene® polyethylene, Evatane® BT copolymers, Lotryl®, Lacqrene® impact polystyrene, SBS high styrenic (Finaclear®) - Lacovyl® PVC, Nakan® vinyl compounds - Rilsan® polyamides 11, Kynar® PVDF, Cristamid® semi-aromatic polyamides - Altuglas® and Plexiglas® PMMA - Orgalloy® thermoplastic alloys - Aqua Keep superabsorbents - Orgasol® ultrafine powders - Rilsan® polyamide 12 powders - Pebax® polyether block amides - Lacqrene® polystyrene - Norasol® polycarboxylate 	<ul style="list-style-type: none"> - pharmaceutical and medical packaging, disposable surgical masks and gowns, bottles and containers, solute and blood bags, laboratory "glassware", syringes - solute and blood bags, catheters, perfusion tubes, blister packs for medicinal products, cosmetics packaging, etc. - medical bags, spectacle frames, technical packaging, catheters, syringes, bags for sterilising medical instruments - artificial crystalline lens, spectacle lenses (corrective, tinted), medical equipment, incubators, tooth-brushes, etc. - bottles - babies' nappies, adult incontinence wear - supports of active principles (vitamins E and A), pharmaceuticals, nail varnish, lipstick, suntan products, make-up powder - powders, skincare products - catheters, dressings, films for surgical garments, flexible spectacle frames, etc. - Petri dishes, syringes, drop tubes - household and industrial detergents
<p>CHEMICALS AND ADDITIVES</p>	<ul style="list-style-type: none"> - Bromochemicals - Thioglycolic acid (TGA), thioacetic acid (TAA) and derivatives - Hydrazine hydrate and derivatives 	<ul style="list-style-type: none"> - tranquillisers, anti-infective, anaesthetic drugs, etc. - hair-removal creams - raw materials for hypertensive and antiparasitic drugs, synthesis of anticancer and antiviral (Aids) drugs, etc.





HYGIENE, HEALTH, BEAUTY



Products

Main applications

CHEMICALS AND ADDITIVES

- Methyl undecylenate, glycerin, cœnanthol
- Chlororochemicals: methylene chloride, sodium hypochlorite
- Hydrogen peroxide (Albone®, Peroxal®, Valsterane®), chlorite, oxygenated solvents
- Norsocryl® acrylic monomers
- Additives: surfactants and specialties, Noranium® amines and derivatives
- Repolem acrylic and acrovynyl emulsions

- Dimethylsulfoxide (DMSO)

- antibiotics, cosmetics, soap and deodorants, perfume
- synthesis solvents, cleaning products, disinfectants (bleach), etc.
- disinfectants, bleaching

- cleaning products and waxes
- pharmaceuticals (ointments, creams, tablets), bases for shampoos and conditioners, textile softeners, etc.
- impregnated nonwovens (cleansing wipes, dressings with active ingredients, etc.)
- synthesis solvents for active principles in pharmaceutical manufacture

MISCELLANEOUS

- Billy Boy®, Rendez-Vous®, Big Ben®
- Nuk®, Tigex®, Vital Systems®
- Polystyrene, polypropylene, polyethylene, PVC

- condoms
- babies' bottles, teats, sterilising products, etc.
- manufacture of disposable razors, hairdryers, etc.





WATER

	Products	Main applications
PLASTICS (Commodity plastics, engineering polymers, functional polymers)	<ul style="list-style-type: none"> - Lacovyl® PVC, Lucalor® chlorinated PVC - High density polyethylene, EVA and PVC - Dorlyl® rigid vinyl compounds - Bipeau®, Alphacan and Alplatène O Bleu®, Lucoflex®, Rétube®, Alplatène Agri® PVC and PE pipes and fittings - Rilsan® polyamide coating powders - Cristamid® semi-aromatic polyamide - Norsorex® oil-absorbent polymers, Norasol® polycarboxylate - Rilsan® polyamide 	<ul style="list-style-type: none"> - high-temperature pipes and fittings, pipes for integrated heating - geomembranes (protection tarpaulins) - mineral water bottles - pipes for drinking water, rain water and irrigation water, effluent drainage and sewage disposal, hot water circuits - lining of pipes for drinking water supply, etc. - filters for water treatment - anti-pollution agents for hydrocarbons - mechanical parts for water meters
CHEMICALS AND SPECIALTIES	<ul style="list-style-type: none"> - Chlorine, bleach, chlorine dioxide, sodium chlorite - Alba 18 aluminium polychloride, Wac®, Wac® HB, Wac® HBA polyaluminium chlorosulphate - Clarfer® ferric chloride - Liozan® hydrazine hydrate 	<ul style="list-style-type: none"> - purification of drinking water, disinfectant, oxidising agent, municipal and industrial waste water treatment, etc. - production of drinking water, purification of domestic water, biological effluent treatment, separation of suspended matter by coagulation-flocculation, etc. - waste water treatment, dephosphatation, desulphidation - component for dispersants, thickeners and detergent aids, anti-rust treatment of boiler pipes, anti-corrosion treatment of thermal and nuclear power stations





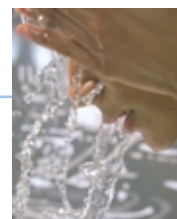
Products

Main applications

CHEMICALS AND SPECIALTIES

- Norsocryl® acrylic and methacrylic monomers
- Surchlor, Oniachlor®, Miami chlorinated derivatives of cyanuric acid
- Hydrogen peroxide (Albone®, Peroxal®, Valsterane®), sodium chlorite
- Acticarbon® activated carbon
- Inipol®, Aquapol®, Hydrotol® petroleum additives and specialties
- Oleophilic drums
- Cloisonyle® process

- component for flocculants (treatment and purification of municipal and industrial effluents) and for dispersants (anti-scale treatment of boiler circuit water and cooling water)
- peroxonation, elimination of micro-pollutants
- removal of odours, taste, toxic substances from drinking water
- anti-pollution products, dispersants for freshwater and sea water, marine pollution control, aquatic herbicides
- water treatment products
- mobile devices for the treatment of polluted industrial and sea water
- system for the purification of municipal waste water and industrial effluents





SPORTS AND LEISURE



	Products	Main applications
PLASTICS (Vinyl polymers, engineering polymers)	<ul style="list-style-type: none"> - Lacovyl® PVC, Nakan® vinyl compounds - Atofina PP polypropylene, Finathene®, Lacqtene® polyethylene - Lacqrene® impact polystyrene - Rilsan® polyamides, Pebax® polyether block amides, Orgalloy® thermoplastic alloys - Altuglas® and Plexiglas® PMMA - Evatane® EVA expanded copolymer foam - Finaprene® SBS elastomers 	<ul style="list-style-type: none"> - engineering flooring for tennis court surfaces, athletics tracks, inflatable swimming pools, inflatable dinghies, fishing boots, beach sandals, balls, etc. - toys, dolls' house accessories, small articles, garden furniture - pieces for building sets, toy people - rollerblades, soles of shoes, football boots, sports shoes, motorcycle helmets, badminton and tennis racquets, golf balls, diving equipment, ski goggles, boots and clothing, etc. - board games (chess, dice, puzzles, etc.), squash court walls, baseball back-board, swimming pool cover - shock-absorbent role and blowing agent for the soles of sports shoes and trainers - soles of shoes
RUBBER	<ul style="list-style-type: none"> - Hutchinson®, Python®, Mosquito®, Carbon Comp® 	<ul style="list-style-type: none"> - tyres for bicycles, mopeds
CHEMICALS	<ul style="list-style-type: none"> - Azobul® hydrazine and derivatives 	<ul style="list-style-type: none"> - blowing agent for PVC (soles of sports shoes and trainers)
STRUCTURAL RESINS	<ul style="list-style-type: none"> - Unsaturated polyesters (Norsodyne®, Synolac®, Resipol®) and gelcoats (Polycor®) 	<ul style="list-style-type: none"> - boat hulls and interior fittings (bunks, chart tables, etc.)





AGRICULTURE



Products

Main applications

PHYTOSANITARY SPECIALTIES AND FERTILISERS (Chlorochemicals, bromochemicals, agrochemicals, etc.)

- Chlorobenzene, chloral
- Chloromethane
- Sobrom® methyl bromide, ethyl bromide
- Nitrogen fertilisers, compound fertilisers, phosphate fertilisers, urea, ammonium nitrate
- Decco® waxes, detergents, fungicides
- Nutriforce®
- Lika®
- Tonigam®
- Biosuper®
- Penncap® M insecticides, Végépron® DS, Clairsol® 85, Amok®, K par K®, Melkior® herbicides, Granéor® 75, Trimanoc®, Pennfluid®, Vondoflo® dithiocarbamate fungicides, Bouillie Bordelaise RSR Disperss®, Cuprofix® copper-based fungicides, Microthiol Spécial Disperss®, Fluidosoufre® sulphur-based fungicides
- EcoModules®
- Disperss®
- Sodium chlorate

- intermediates for insecticides, plant protection products
- synthesis solvent
- product for soil and silo treatment
- soil fertilisation
- post-harvest protection of fruits and vegetables
- nitrogen leaf fertiliser for wheat
- nitrogen fertiliser for meadows
- new range of NPK fertilisers custom-developed to fulfil the requirements of a plant in a given area
- hygiene product for treating soil and bedding in livestock buildings
- pre-harvest crop protection products
- micro-encapsulation technique
- granulation technique
- weedkiller

PLASTICULTURE (Commodity plastics, engineering polymers, functional polymers, etc.)

- Lacqtene® polyethylene, Lacovyl® PVC films
- Evatane® BT copolymers
- Atofina PP polypropylene
- Alphacan® PVC and PE pipes and fittings
- Cristamid® semi-aromatic polyamides
- Orgalloy® thermoplastic alloys
- Altuglas® PMMA
- Lotryl® EDA copolymers
- Kynar® PVDF

- bags and protective films for crops, for greenhouse covers, mulching, irrigation
- packaging films, greenhouses
- mulching films, string, greenhouse, etc.
- irrigation and drainage pipes
- components for farming equipment
- tool handles, barrier film for soil fumigation
- greenhouses and cold frames, irrigation
- agricultural film
- multilayer structure for tractor roof, lawnmower hood





CONSUMER GOODS

	Products	Main applications
DIY AND HOME IMPROVEMENT	<ul style="list-style-type: none"> - Quelyd® - Sader®, Bostik® - Araldite® 	<ul style="list-style-type: none"> - wallpaper adhesives - glues for assembly and repair - fast-setting glue to repair crystal, jewelry, glass, etc.
HOUSEWORK	<ul style="list-style-type: none"> - Mapa®, Fleur de peau® - Spontex® - Polystyrene, polypropylene, polyethylene, PVC, Altuglas® and Plexiglas® PMMA 	<ul style="list-style-type: none"> - household gloves, gardening gloves, DIY gloves - sponges, scouring sponges, brooms and brushes, dusters, etc. - household electrical equipment (foodmixers, vacuum cleaners, refrigerators, etc.), containers and tableware (cups, cutlery, trays, etc.), airtight food storage boxes, refrigerator shelves and fittings, clip picture frames
COMMUNICATION	<ul style="list-style-type: none"> - Lacqrene® polystyrene - Pebax® polyether block amide - Altuglas® and Plexiglas® PMMA - Kynar Powerflex™-LBG PVDF 	<ul style="list-style-type: none"> - housing for television and IT equipment, boxes for audio and video cassettes and CDs - improved comfort in the use of photocopiers, printers and telephones (antistatic properties enhancing the plastics) - DVD manufacture - component of rechargeable batteries
MISCELLANEOUS	<ul style="list-style-type: none"> - Chlorine, monochloroacetic acid (MCAA), sodium monochloroacetate (SMC), Albone® hydrogen peroxide, sodium chlorate and chlorite - Oxygenated solvents, sulphur derivatives, Norsocryl® acrylic monomers, Garbeflex® phthalates, diacids (phthalic anhydride) 	<ul style="list-style-type: none"> - paper pulp treatment, paper bleaching, weedkiller - varnishes, inks and paints

