

Product's name	Product's short description
<b>Flame Retardants ( Phosphorous Chemicals )</b>	
	<p>Flame retardants must restrain, retard or suppress burning processes.</p> <p>Depending upon polymer and fire test, flame retardants act in one or more phases of the burning process: during heating up, decomposition, inflammation, propagation of flames and smoke development. They can act in a chemical or a physical way during the combustion, whereby several reactions may occur simultaneously.</p>
	<b>Polymers</b>
	<p>With Disflamoll® and Levagard® LANXESS offers flame retardants based on phosphorus, which reduce the flammability of plastics and / or improve their properties, for example the processability or elasticity. The two product lines are used in thermoplastics, thermosets, polyurethane foams and elastomers.</p>
	<b>Thermoplastics</b>
<b>Flexible PVC (PVC-P)</b>	<p><b>Flexible PVC (PVC-P)</b></p> <p><b>Styrenics (PC/ABS; HIPS/PPE)</b></p> <p><b>Celluloseacetate (CA)</b></p> <p>Disflamoll® products show, in addition to their flame retardant effect, low gelling temperature, good plasticizing effect as well as low temperature flexibility, when they are used in flexible PVC.</p> <p>They can also decrease plastisol viscosity and enable the production of flame retardant articles which have to be lightfast and exhibit low smoke density.</p> <p><b>Disflamoll Range</b></p>
<b>Disflamoll® DPK</b>	<p>Cresyl diphenyl phosphate</p> <p>Very effective flame retardant with plasticizing effect for PVC.</p> <p>Imparts good saponification resistance and good resistance to cerosine extraction.</p>
<b>Disflamoll® DPO</b>	<p>2-Ethylhexyl diphenyl phosphate</p> <p>Flame retardant with plasticizing effect for PVC.</p> <p>Acts as smoke suppressant, imparts cold flexibility and light fastness.</p> <p>Recommendable for the plastisol manufacturing.</p>
<b>Disflamoll® TKP</b>	<p>Tricresyl phosphate</p> <p>Effective flame retardant with plasticizing effect for PVC. Low volatility,</p> <p>Good gelling behaviour and thermal stability.</p>
<b>Disflamoll® TKP-P</b>	<p>Tricresyl phosphate</p> <p>Effective flame retardant with plasticizing effect for PVC. Lower volatility than TKP, good gelling behaviour and thermal stability.</p>
<b>Disflamoll® TOF</b>	<p>Tris-(2-ethylhexyl) phosphate</p> <p>Plasticizer with very good cold flexibility and light resistance.</p> <p>Acts as viscosity reducer as well.</p>
<b>Disflamoll® TP LXS 51036</b>	<p>Formulation</p> <p>Flame retardant with plasticizing effect for PVC. Recommendable for the plastisol manufacturing especially for synthetic leather.</p>
<b>Styrene Copolymers PC/ABS; HIPS/PPE</b>	<p>PC / ABS blends must show for specific application areas in addition to heat resistance, toughness and stiffness and good flame-retardant properties.</p> <p>With the product Disflamoll® TP, LANXESS offers a flame retardant which enables PC/ABS blends a classification in accordance with UL 94.</p>
<b>Disflamoll®TP</b>	<p>Triphenyl phosphate</p> <p>Flame retardant for PC/ABS, HIPS/PPE and other blends.</p>
<b>Cellulose Acetate (CA)</b>	<p>LANXESS offers a number of additives for cellulose acetate and similar cellulose derivatives, acting as flame retardants and as processing aids.</p>
<b>Disflamoll®DPK</b>	<p>Cresyl diphenyl phosphate</p>

Disflamoll®DPO	2-ethylhexyl diphenyl phosphate is recommendable for food contact applications.
Disflamoll®TKP	Tricresyl phosphate
Disflamoll®TKP-P	Tricresyl phosphate
Disflamoll®TP	Triphenyl phosphate makes the material hydrophobic.
<b>Thermosetting</b>	
	<p><b>Epoxy Resins</b></p> <p><b>Phenolic Resins</b></p> <p><b>Unsaturated Polyester Resins</b></p> <p>Depending on the application area, thermoset materials must meet mechanical, electrical and fire resistant requirements.</p> <p>Flammability according to the UL classification V-0 at a certain wall thickness can be achieved by using flame retardants from our product range.</p> <p>Blends made of Levagard® DMPP and Bayfomox® WMP, are also suited for UP resins.</p> <p>LANXESS offers</p>
<b>Epoxy Resins</b>	
Disflamoll®TP	Triphenyl phosphate
Disflamoll®DPK	Cresyl diphenyl phosphate
Levagard® DMPP	Dimethyl propane phosphonate
Bayfomox® WMP MIX VPA1 4072	Nitrogen and Phosphorous containing intumescent additive
<b>Phenolic Resins</b>	LANXESS offers
Disflamoll®TP	Triphenyl phosphate
Disflamoll®DPK	Cresyl diphenyl phosphate
<b>Unsaturated Polyester Resins</b>	LANXESS offers
Disflamoll®TP	Triphenyl phosphate
Disflamoll®DPK	Cresyl diphenyl phosphate
Levagard® PP	Tris-(2-chloroisopropyl)-phosphate
Levagard® DMPP	Dimethyl propane phosphonate
Bayfomox® WMP MIX VPA1 4072	Nitrogen and Phosphorous containing intumescent additive
<b>Polyurethanes (PUR)</b>	
	<p><b>Rigid Polyurethane Foam</b></p> <p><b>Flexible Polyurethane Foam</b></p> <p><b>Thermoplastic Polyurethane (TPU)</b></p> <p>LANXESS offers</p> <p><b>Levagard Range</b></p> <p>Levagard® products are phosphorus compounds suitable to make polyurethane foam materials fire resistant. PUR foams containing Levagard® products often meet the strict requirements of building codes for shift press fabric panels and spray foam insulations.</p>
<b>Rigid Polyurethane Foam</b>	
Levagard® 4090 N	N,N-Dihydroxyethyl-aminomethane-phosphonic acid- diethylester Reactive fire retardant for PUR/PIR foams.
Levagard® DMPP	Dimethyl propane phosphonate Very effective fire retardant for PUR/PIR-rigid foams.
Levagard® PP	Tris-(2-chloroisopropyl)-phosphate Flame retardant for PUR rigid foams.
Levagard® TEP-Z	Triethyl phosphate Flame retardant for PUR rigid foams and thermosets. Viscosity reducer for polyols and prepolymers.
	<p><b>Bayfomox Range</b></p> <p>End products for the passive structural fire protection approved by national authorities can be produced by using Bayfomox® product range.</p> <p>Typical applications include: fire safety seals, joint seals, vents and others.</p>

Bayfomox® PA	Polyol dispersion Raw material for the manufacturing of polyurethane moulded articles.
Bayfomox® P	Isocyanate component Raw material for the manufacturing of polyurethane moulded articles.
Bayfomox® WMP MIX VPA1 4072	Nitrogen and Phosphorous containing intumescent additive Additive for the improvement of fire resistance of water based systems.
<b>Flexible Polyurethane Foam</b>	A large part of the polyurethane foam production in the automotive and furniture industry, is fire-resistant. Flame retardants such as Levagard® PP and aryl phosphates such as Disflamoll® DPK or Disflamoll® TKP are used in the production of flexible foams.  The latter two are adequated for flame lamination process.
Disflamoll® DPK	Cresyl diphenyl phosphate <b>adequated for flame lamination.</b>
Disflamoll® TKP	Tricresyl phosphate <b>adequated for flame lamination.</b>
Disflamoll® TKP-P	Tricresyl phosphate <b>adequated for flame lamination.</b>
Levagard® PP	Tris-(2-chloroisopropyl)-phosphate <b>Flame retardent for PUR foams.</b>
<b>Thermoplastic Polyurethane (TPU)</b>	Thermoplastic Polyurethanes are characterised by low abrasion, high elasticity and good resistance to chemicals. TPU is combustible, so that to achieve a flame retardant effect the addition of flame retardants is necessary.  The addition of Disflamoll® DPK can make TPU compounds (polyether or polyester) to achieve the classification V2, V1 or VO of the UL 94.
Disflamoll® DPK	Cresyl diphenyl phosphate Fire retardant for TPU based on polyether or polyester.
<b>Elastomers</b>	
<b>Synthetic Rubber</b>	Most of the phosphoric acid esters of the Disflamoll® range can act as fire retardants, plasticizers and processing aids in the natural and synthtetic rubber.  They can be used instead of mineral oils or other flammable synthetic plasticizers incorporated into the rubber. Disflamoll® TKP and Disflamoll® DPK can be used in TPU compounds when fire resistance and flexibility are required.  If there are specific requirements for the cold flexibility and elasticity, than Disflamoll® DPO and Disflamoll® TOF are recommended.
Disflamoll® DPK	Cresyl diphenyl phosphate Limit of compatibilty*: NBR and CR up to 20%, IIR and NR up to 15%, SBR up to 10%. <b>Very effective flame retardant, standard product.</b>
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate Limit of compatibility*: NR, SBR, NBR and CR up to 20%, good softener.
Disflamoll® TKP	Tricresyl phosphate Limit of compatibility*: NR, SBR, NBR and CR up to 20%; IRR up to 15% <b>good fire restistance and low volatility.</b>
Disflamoll® TOF	Tris-(2-ethylhexyl) phosphate Limit of compatibility*: NR and IRR up to 20%, NBR and CR up to 10%, SBR up to 15%. <b>Good elasticity, compatible with less polar elastomeres e. g. EPDM.</b>
Limit of compatibility*:	Empirical values are in each case significantly higher. The performance depends heavily on the polarity of the elastomer. As higher the polarity of the elastomer the better is the compatibility with Disflamoll® products.
<b>Markets</b>	
	The current trends in construction, automotive and electrical industry indicate a significant increase in the consumption of flame retardants used in these industries.
<b>Building</b>	
	Plastic materials are becoming increasingly important in the building sector.  Important applications in the construction sector are insulating materials, floor coverings,

	<p>film and roofing sheets, cables, pipes, door and window profiles, surface coatings, adhesives and sealants.</p> <p>Products from the Disflamoll® range are mainly used in this area.</p> <p><b>Disflamoll Range</b></p>
Disflamoll® DPK	<p>Cresyl diphenyl phosphate</p> <p>Very effective flame retardant with plasticizing effect for PVC.</p> <p>Imparts good saponification resistance and good resistance to cerosene extraction.</p>
Disflamoll® DPO	<p>2-Ethylhexyl diphenyl phosphate</p> <p>Flame retardant with plasticizing effect for PVC. Acts as smoke suppressant, imparts cold flexibility and light fastness. Recommendable for the plastisol manufacturing.</p>
Disflamoll® TKP	<p>Tricresyl phosphate</p> <p>Effective flame retardant with plasticizing effect for PVC.</p> <p>Low volatility, good gelling behaviour and thermal stability.</p>
Disflamoll® TKP-P	<p>Tricresyl phosphate</p> <p>Effective flame retardant with plasticizing effect for PVC.</p> <p>Low volatility, good gelling behaviour and thermal stability.</p>
Disflamoll® TOF	<p>Tris-(2-ethylhexyl) phosphate</p> <p>Plasticizer with very good cold flexibility and light resistance.</p> <p>Acts as viscosity reducer as well.</p>
Disflamoll® TP LXS 51036	<p>Phosphate blend</p> <p>Flame retardant with plasticizing effect for PVC.</p> <p>Recommendable for the plastisol manufacturing especially for synthetic leather.</p> <p><b>Levagard Range</b></p> <p>The Levagard® - range is mainly used in PUR / PIR foams.</p> <p>The type of flame retardant and the percentage used determine the classification of the end applications according to different standards DIN 4102 or SBI.</p>
Levagard® 4090 N	<p>N,N-Dihydroxyethyl-aminomethane-phosphonic acid- diethylester</p> <p>Reactive fire retardant for PUR, phenolic resins and other thermosets.</p>
Levagard® DMPP	<p>Dimethyl propane phosphonate</p> <p>Very effective fire retardant PUR-rigid foams and other thermosets.</p>
Levagard® PP	<p>Tris-(2-chloroisopropyl)-phosphate</p> <p>Fire retardant for PUR-rigid foams and thermosets.</p>
Levagard® TEP-Z	<p>Triethyl phosphate</p> <p>Fire retardant for PUR-rigid foam and thermosets.</p> <p>Viscosity reducer for polyol formulations and prepolymers.</p> <p><b>Bayfomox Range</b></p> <p>LANXESS developed its Bayfomox® brand for customers in the construction industry to prevent spreading of fires in buildings.</p>
Bayfomox® PA	<p>Polyol dispersion</p> <p>Raw material for the production of flame retardent moulded PUR articles.</p>
Bayfomox® P	<p>Isocyanate component</p> <p>Raw material for the production of flame retardent moulded PUR articles.</p>
	<b>Transportation</b>
	<p>With air, rail and water vehicles, there are strict rules in terms of flammability and fire behaviour of materials. In the automotive industry, the use of flame retardants becomes increasingly important, as increasingly powerful engines produce ever higher service temperatures.</p> <p>More and more electrical and electronic components in cars create the risk of short-circuiting and overheating.</p>
Disflamoll® DPK	Cresyl diphenyl phosphate
Disflamoll® TKP	Tricresyl phosphate
Disflamoll® TKP-P	Tricresyl phosphate
Levagard® 4090 N	N,N-Dihydroxyethyl-aminomethane-phosphonic acid- diethylester
	<b>Electrical and Electronics Applications</b>
	<p>The electrical and electronic devices include voltage components.</p> <p>During the operation short circuits or fire sources may appear due to thermal loads.</p> <p>That's why plastic articles which normally are flammable must be equipped with</p>

	fire retardants. International standards require that materials for these applications should be classified according to UL 94V.
Disflamoll® TKP	Tricresyl phosphate
Disflamoll® TP	Triphenyl phosphate
	<b>Coatings Adhesives Sealings (CAS)</b>
	<p>There is an increasingly demand after flame resistant CAS applications. In order to fulfil numerous fire standards, LANXESS offer following product ranges of flame retardants Disflamoll® Levagard® and Bayfomox®.</p> <p>In addition our products are often used as viscosity reducers, processing aids and softening agents. Such additional valuable properties are often crucial for the election of our products in CAS applications.</p> <p>In coatings based polyurethane, polyester or epoxy resins, products such as Levagard® PP, the halogen-free Levagard® DMPP, Disflamoll® TKP and the powder additive Bayfomox WMP can be used as flame retardants. Typical amounts are 5 to 15%.</p> <p><b>Nitrocellulose</b></p> <p><b>Polyurethane</b></p> <p><b>Epoxy</b></p> <p><b>Polyester</b></p> <p>LANXESS offers</p>
<b>Nitrocellulose</b>	LANXESS offers
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate
<b>Polyurethane</b>	LANXESS offers
Disflamoll® DPK	Cresyl diphenyl phosphate *
Disflamoll® TKP	Tricresyl phosphate *
Disflamoll® TKP-P	Tricresyl phosphate *
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate *
Levagard® PP	Tris-(2-chloroisopropyl)-phosphate
Levagard® DMPP	Dimethyl propane phosphonate
Levagard® TEP-Z	Triethyl phosphate
Bayfomox® WMP MIX VPA1 4072	Nitrogen and Phosphorous containing intumescent additive
	* = because synergistic effect, the addition of Bayfomox® WMP or ammonium polyphosphate is recommendable.
<b>Epoxy</b>	LANXESS offers
Disflamoll® DPK	Cresyl diphenyl phosphate *
Disflamoll® TKP	Tricresyl phosphate *
Disflamoll® TKP-P	Tricresyl phosphate *
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate *
Levagard® PP	Tris-(2-chloroisopropyl)-phosphate
Levagard® DMPP	Dimethyl propane phosphonate
Levagard® TEP-Z	Triethyl phosphate
Bayfomox® WMP MIX VPA1 4072	Nitrogen and Phosphorous containing intumescent additive
	* = because synergistic effect, the addition of Bayfomox® WMP or ammonium polyphosphate is recommendable.
<b>Polyester</b>	LANXESS offers
Disflamoll® DPK	Cresyl diphenyl phosphate *
Disflamoll® TKP	Tricresyl phosphate *
Disflamoll® TKP-P	Tricresyl phosphate *
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate *
Levagard® PP	Tris-(2-chloroisopropyl)-phosphate
Levagard® DMPP	Dimethyl propane phosphonate
Levagard® TEP-Z	Triethyl phosphate
Bayfomox® WMP MIX VPA1 4072	Nitrogen and Phosphorous containing intumescent additive
	* = because synergistic effect, the addition of Bayfomox® WMP or

	ammonium polyphosphate is recommendable.
<b>Synthesis Chemicals ( Phosphorous Chemicals )</b>	
	<p>Chemicals offered by LANXESS cover a broad spectrum of applications in many branches of industry. Characterized by a high degree of purity, our alkyl phosphites and phosphorus chloride synthesis chemicals are commonly used in the manufacture of pharmaceutical and agrochemical products.</p> <p>The chemical versatility offered by these products ensures that they form the important building blocks in chemical synthesis.</p> <p><b>Phosphorous Chlorides</b></p> <p><b>Phosphites</b></p> <p>LANXESS offers</p>
<b>Phosphorous Chlorides</b>	
Phosphorous oxichloride	Phosphorous oxichloride reactive chlorinating and phosphorylating intermediate product.
Phosphorous sulfochloride	Phosphorous sulfochloride reactive chlorinating and thiophosphorylating intermediate product
Phosphorous trichloride	Phosphorous trichloride reactive chlorinating and phosphorylating intermediate product.
<b>Phosphites</b>	LANXESS offers
Diethyl phosphite	Diethyl phosphite phosphorylating and reducing agent for chemical synthesis phosphorylating and reducing agent for chemical synthesis.
Dimethyl phosphite	Dimethyl phosphite phosphorylating and reducing agent for chemical synthesis.
<b>Water Treatment Chemicals( Phosphorous Chemicals )</b>	
<b>Water Treatment Chemicals</b>	<p>Bayhibit® - products based on the active substance 2-Phosphonobutan-1,2,4-tricarboxylic acid (PBTC), which was developed by LANXESS , are used as scale- and corrosion inhibitors.</p> <p>Based on the outstanding stability to bleach, lye, chlorine and bromine and their optimal environmental profile Bayhibit products can be used as additives in cleaning agents, for cooling and processing water.</p> <p>This success is based on the high quality which we can guarantee with our longstanding production track record.</p>
Bayhibid® AM	2-Phosphonobutane-1,2,4-tricarboxylic acid (50% solution in water)
Bayhibid® N	2-Phosphonobutane-1,2,4-tricarboxylic acid tetrasodium salt (41% solution in water)
Bayhibit® S	2-Phosphonobutane-1,2,4-tricarboxylic acid tetrasodium salt (granulate form)
<b>Specialties ( Phosphorous Chemicals )</b>	
	<p><b>Extraction additives</b></p> <p><b>Antifoams</b></p> <p><b>Catalysts for Chemical Synthesis</b></p>
<b>Extraction additives</b>	<p>Tributyl phosphate (TBP) and Baysolvex®D2EHPA figure among the best proven extraction additives. Both are not miscible with water.</p> <p>Tributyl phosphate, as a neutral extraction aid, extracts acids and metal salts from aqueous solutions.</p> <p>Baysolvex®D2EHPA is an effective extracting additive for the cleaning, enrichment, separation and recovery of metal salts. Application areas are: separation and production from rare earths, extraction of zinc, vanadium, beryllium and others.</p>
Baysolvex® D2EHPA	Di- (2-ethylhexyl)-phosphoric acid

Tributyl phosphate	Separation of Ur, Zn, Fe, Ca, Be, Co or Mo. Tributyl phosphate Separation and recovery of Ur, As, Cr and Pt as well as for the purification of phosphoric, nitric and hydrofluoric acids.
<b>Antifoams</b>	Tributyl phosphate and Tri-iso-butylphosphate are used as antifoaming agents in various aqueous systems. They work both foam-destroying and foam-preventing.  Areas of application are: concrete additives, glues and adhesives, drilling as well as textile auxiliaries.
Tri-iso-butyl phosphate	Tri-iso-butyl phosphate additive for liquifying concrete, textile auxiliaries, paper coating compounds.
Tributyl phosphate	Tributyl phosphate additive for liquifyng concrete, textile auxiliaries, paper coating compounds.
<b>Catalysts for Chemical Synthesis</b>	Levagard® TEP-Z is used as a catalyst in the ketene synthesis in the production of acetic anhydride according to the Wacker procedure. Acetic anhydride serves as a raw material for the production of cellulose acetate („filter tow“) and as a stabilising agent for organic peroxides.  In the synthesis of water peroxide Disflamoll® TOF is used as a component in the solvent mixture for the oxygen transfer system anthraquinone/anthrahydrochinone.  Dibutylphosphoric acid (DBP) is used as a non volatile and highly soluble acid ester in organic media, for the production of antistatic agents (textile industry), as a release agent in PUR-applications and as a sour catalyst for chemical syntheses.
Dibutyl phosphate	Dibutyl phosphate precursor for antistatics, release agents in PUR applications, acid catalyst in organic synthesis.
Disflamoll® TOF	Tris-(2-ethylhexyl)-phosphate catalyst in the production of hydrogen peroxid.
Levagard® TEP-Z	Triethyl phosphate synthesis of ketenes.
<b>Lubricants and Oil Additives ( Phosphorous Chemicals )</b>	
<b>Lubricants and Oil Additives</b>	The lubricating oils are tailored blends of synthetic base stocks of different origin, refining and viscosity, as well as of active substances (additives).  Apart from the major tasks as to reduce friction, wear and tear, to lubricate moving parts and heat transportation, for certain applications completely special additional characteristics (corrosion protection, cleaning efficiency, etc.) are demanded.  One reaches this by mixing the suitable basic oil and special additives. LANXESS offers a range of additives for this purpose.
Disflamoll® DPO	2-Ethylhexyl diphenyl phosphate hydraulic fluid, cooling lubricant.
Disflamoll® TKP-P	Tricresyl phosphate extreme pressure/antiwear additive for hydraulic, gear and engine oils.
Disflamoll® TOF	Tris-(2ethylhexyl) phosphate cooling lubricant
Tributyl phosphate	Tributyl phosphate fire resistant hydraulic fluid.
<b>Organic Colorants for Plastics ( Colorants )</b>	
<b>Solvent Dyes for Plastics</b>	<b>Solvent Dyes for Plastics</b>  <b>Organic Pigments for Plastics</b>  LANXESS offers  These soluble dyes available in a variety of colors are characterized by high thermostability high lightfastness and weather stability high tinting strength high brilliance  MACROLEX® dyes are ideally suited for the coloring of amorphous polymers
MACROLEX®	

such as PS, PC, ABS, PMMA and PET. Coloration can be varied from transparent to total coverage depending on the type of polymer and colorant combination (organic/inorganic pigments).

MACROLEX® dyes fulfill numerous legal requirements for use in food packaging and children's toys.

MACROLEX® dyes are also available as microgranules, which offer our customers the following advantages over the conventional powder form:

- low dusting
- good flow and meterability
- good dispersibility
- good solubility

The MACROLEX® range of organic dyes is available mainly both in powder form and, as granules. The advantages of the granulated version for the customer are improved flow properties and dispersibility as well as low level dust generation.

MACROLEX® dyes are suitable for coloring transparent plastic components such as automobile brake or tail lights, sunglasses or decorative sheets.

MACROLEX® dyes are also used to color PC/PET bottles and cosmetic packaging, no matter if the desired color is yellow, green, red, amber or blue.

The use in food packaging satisfies practically all applicable statutory requirements.

In combination with organic and inorganic pigments,

MACROLEX® dyes are widely used for the ABS and PC/ABS coloring of toys, vacuum cleaner housings, household appliances and interior and exterior automotive components.

MACROLEX® Blue 3R GRAN	Anthraquinone
MACROLEX® Blue RR GRAN	Solvent Blue 97
MACROLEX® Fluorescent Yellow 10GN	Solvent Yellow 160:1
MACROLEX® Fluorescent Red G	Coumarin
MACROLEX® Yellow 3G GRAN	Solvent Yellow 93
MACROLEX® Yellow 6G GRAN	Solvent Yellow 179; D. Y. 201
MACROLEX® Yellow E2R GRAN	Quinophthalone
MACROLEX® Yellow G GRAN	Solvent Yellow 114; D. Y. 54
MACROLEX® Green 5B GRAN	Solvent Green 3
MACROLEX® Green G GRAN	Solvent Green 28
MACROLEX® Orange 3G GRAN	Solvent Orange 60
MACROLEX® Orange R GRAN	Solvent Orange 107; D. O. 47
MACROLEX® Red A	Dyestuff mixture ( New )
MACROLEX® Red 5B GRAN	Solvent Red 52
MACROLEX® Red B	Solvent Red 195
MACROLEX® Red E2G GRAN	Solvent Red 179
MACROLEX® Red EG GRAN	Solvent Red 135
MACROLEX® Red H	Azo
MACROLEX® Red Violet R GRAN	D. V. 31; D. V. 26; S. V. 59
MACROLEX® Violet 3B	Solvent Violet 13 ( does not soluble in Stearic Acid )
MACROLEX® Violet 3R GRAN	Solvent Violet 36
MACROLEX® Violet B GRAN	Solvent Violet 13 ( Solubility in Stearic Acid : 20 g/l at room temperature 23°C /73 °F)

#### Organic Pigments for Plastics

LANXESS offers

#### BAYPLAST®

The organic pigments were developed especially for coloring plastics. However, they also display optimum dispersion characteristics in powder coatings. The BAYPLAST® products are characterized by their good color strength, excellent weather stability and lightfastness.

The BAYPLAST® range of organic pigments is characterized by particularly high lightfastness, heat resistance and migration resistance. They can be used in a large range of plastics and complement the range of organic MACROLEX® dyes.

BAYPLAST® is especially suitable for the manufacture of through-colored plastic articles such as automotive components, housings and household appliances.

BAYPLAST® Yellow 5G GRAN	Pigment Yellow 150 , azo nickel complex pigment , <b>low dusting microgranulate</b> , Colouring of PP fibres, polyamide fibres, polyolefine and polyamide.
BAYPLAST® Yellow 5GN 01	Pigment Yellow 150 , azo nickel complex pigment , <b>powder</b> , Colouring of PP fibres, polyamide fibres, polyolefine and polyamide.
BAYPLAST® Yellow G GRAN	monoazo-ca-pigment ,low dusting microgranulate,coloring of polyamide .

#### Dyes for ink jet printing ( Colorants )



	<p>Laminate is a high-grade wood imitation. Production involves first sticking a layer of paper on to a base material (e.g. particle board), and then printing the wood grain on top of this.</p> <p>The paper is coated with melamine resin and has excellent resistance properties.</p>
<b>Products for the Production of Laminate Printing Inks</b>	<p>LANXESS offers high-grade pigments for use in laminate printing inks. Our products comply with the specifications of the printing inks industry.</p> <p>Laminate is a high-grade wood imitation. Production involves first sticking a layer of paper on to a base material (e.g. particle board), and then printing the wood grain on top of this.</p> <p>The paper is coated with melamine resin and has excellent resistance properties.</p>
Yellow Pigment E4GN	Pigment Yellow 150 , azo nickel complex pigment powder, transparent organic pigment with extremely high light, weather and heat stability.
Special Bottom 50 UD	aqueous preparation of PU binder, contains ethanediol , Polyurethane binder to promote adhesion of the pigments to the surface, at the same time forming a flexible surface film.
Pigment Binder AH	aqueous preparation of casein binder, contains ε-caprolactam , Fixes pigments during printing and drying of laminated paper. Prevent migration of the pigments during both printing and pressing. Gets transparent during pressing so that the brilliance of the pigments is not effected.
<b>Aqueous pigment preparations:</b>	<p><b>LEVANYL® LF</b> A range of organic pigment preparations that enable high transparency of the print through fine dispersion.</p>
LEVANYL® Blue BR-LF	<b>Pigment Blue 15 / 15:3</b>
LEVANYL® Blue G-LF	<b>Pigment Blue 15:3</b>
LEVANYL® Brown HS-LF 01	Mixture of Pigment Orange 34 / Pigment Yellow 74 / Pigment Black 7
LEVANYL® Carmine G-LF	Pigment Red 95
LEVANYL® Yellow 2GX-LF	<b>Pigment Yellow 74 ( Opaque )</b>
LEVANYL® Yellow 5GX-LF	<b>Pigment Yellow 74 ( Transparent )</b>
LEVANYL® Yellow E4G-A	<b>Pigment Yellow 150 (azo-Ni-complex dispersion, content approx. 25% ,anionic )</b>
LEVANYL® Yellow GN-LF	Pigment Yellow 1
LEVANYL® Yellow HR-LF	Pigment Yellow 83
LEVANYL® Green G-LF	Pigment Green 7
LEVANYL® Orange GR-HS-LF	<b>Pigment Orange 34</b>
LEVANYL® Orange RN-LF 01	Pigment Orange 5
LEVANYL® Red BB-LF	<b>Pigment Red 112</b>
LEVANYL® Black A-SF	Pigment Black 7 (carbon black dispersion , pigment content approx. 28% ,anionic )
LEVANYL® Black B-LF	<b>Pigment Black 7 ( neutral black , pigment content approx. 38% , nonionic )</b>
LEVANYL® Black C-LF	Pigment Black 7 ( <b>high color strength black</b> ,content approx. 40% ,nonionic )
LEVANYL® Black N-LF	<b>Pigment Black 7 (green-shade black , pigment content approx. 40% , nonionic )</b>
LEVANYL® Violet BN-LF	Pigment Violet 23
LEVANYL® Blue R-LF	<b>Pigment Blue 15:0</b>
	<p><b>LEVANOX® LF</b> A range of inorganic pigment preparations with a high covering power.</p>
LEVANOX® Brown 610 LF	Mixture of Pigment Red 101 / Pigment Yellow 42 / Pigment Black 11 ( Bayferrox 610 )
LEVANOX® Yellow 1420 LF	Pigment Yellow 42 ( Bayferrox 1420 , red cast yellow )
LEVANOX® Yellow 3910 LF	<b>Pigment Yellow 42 ( Bayferrox 3910LV , green cast yellow )</b>
LEVANOX® Green G-LF	Pigment Green 17 ( Chrome Oxide Green GN-M )
LEVANOX® Red 130 LF	<b>Pigment Red 101 ( Bayferrox 130 M )</b>
LEVANOX® Black 303 LF	Pigment Black 33 ( Bayferrox 303T )
LEVANOX® Ultramarine 3113 LF	<b>Pigment Blue 29 ( Ultramarine E 38 , 400 °C , Light Fastness : 8)</b>
LEVANOX® White R-LF	Pigment White 6 ( Bayertitan R-KB-2 )
<b>Dyes for the office supplies industry ( Colorants )</b>	
	<p>Generally dyes for office supplies inks have to fulfill less strict purity criteria as dyes for ink-jet inks.</p> <p>Nevertheless, many requirements are very similar and ask for comparable characteristics and quality standards.</p>

	<p>In addition, with office supply inks there are special property profiles such as document fastness, fluorescent or erasable inks.</p> <p>LANXESS offers water-soluble specialty dyes with high purity, specified surface tension and high color strength for the office supplies industry.</p> <p>The range also contains water and solvent soluble Nigrosine dyes.</p> <p>Furthermore, all BAYSCRIPT® colorants can be employed advantageously for high-quality inks in the office supplies industry.</p> <p>Particularly important in the office supplies industry is the compliance with the statutory ecological standards which lay down the limits, e.g. for heavy metals or free aromatic amines.</p> <p>For most LANXESS colorants of the ranges for ink-jet and office supplies inks the compliance with corresponding limits are specified and documented in the certificate of analysis for every batch.</p> <p>Further detail information can be taken from our technical data sheets and product specifications.</p>
<b>Specialty dyes for the office supplies industry</b>	<p>The LANXESS range of specialty dyes for the office supplies industry covers the demands for a huge number of office applications, e.g.:</p> <p><b>Pyranin 120%</b>, a brilliant, strongly fluorescent yellow dye for highlighter inks</p> <p><b>Special Violet S4B-F powder</b>, a brilliant violet dye</p> <p><b>Special Brilliant Blue FFR 40% liq.</b>, a low-salt brilliant blue dye which can also be used for the shading of ink-jet inks</p> <p><b>ASTRA™ Blue Base 6GGL</b>, a blue phthalocyanine dye which can be used in solvent based ball-point pen pastes as well as in aqueous formulations as a non-soluble and non-washing out dye in combination with basic dyes</p>
Pyranine 120%	Especially suitable for highlighter inks.
Special Brilliant Blue FFR liq 40% 01	and low salt content. Especially suitable for stationery inks.
Special Orange GX-S	<b>A. O. 10</b> , High purity orange powder with high surface tension (> 40 mN/m).
Special Orange WS FW	<b>D. O. 102</b> Precipitation dye for ballpoint pen inks, suitable in combination with basic dyes.
Special Turquoise Blue AE	<b>A. BI. 9</b> , Brilliant green-shade blue powder. Especially suitable for stationery applications.
Special Violet S4B-F 02	and specially low chromium content (< 25 mg/kg, EN 71-3 compliant).
<b>Nigrosine dyes for the office supplies industry</b>	<p>Our range of black Nigrosine dyes contains for example:</p> <p><b>Nigrosine WLF powder</b>, a purified black dye (C.I. Acid Black 2) also available in a liquid formulation as Nigrosine W liquid</p> <p><b>Nigrosine WLAH powder</b>, a neutrally black shaded dye (C.I. Acid Black 2)</p> <p><b>Nigrosine Base BA powder</b>, a low residue black dye (C.I. Solvent Black 7) with controlled low aniline content for ball-point pen pastes and stamp pad inks.</p> <p>A 30% dispersion in oleic acid for easy handling is available as Nigrosine Base BA liquid.</p> <p><b>Nigrosine Lacquer Black H powder</b>, a low residue black dye (C.I. Solvent Black 5) for alcohol-based inks</p>
Nigrosin BAP	<b>S. Bk. 7</b> , Standard grade of Solvent Black 7.
Nigrosine Lacquer Black H	<b>S. Bk. 5</b> , Special low residue powder grade black for alcohol-based inks.
Nigrosine Black A liq.	Especially suitable for alcohol-based industrial inkjet and stamp-pad inks.
Nigrosine W liq.	<b>A. Bk. 2</b> , Lightfast black dye with very good water fastness for stationery inks.
Nigrosin WLF	<b>A. Bk. 2</b> , Powder version of Nigrosine W liq. with very good water fastness for stationery inks.
Nigrosine Base BA	<b>S. Bk. 7</b> , Special low residue powder grade black for solvent inkjet and stationery inks.
Nigrosine Base BA liq.	<b>S. Bk. 7</b> , Dispersion of Nigrosine Base BA in ethanol/1-methoxy-2-propanol. Especially suitable for alcohol-based industrial inkjet and stamp-pad inks.
<b>Paints and Coatings ( Colorants )</b>	

Paints and Coatings	
	<p>The producers of paints and coatings have high requirements for the use of pigments. The dyes and pigments offered by LANXESS are characterized by their outstanding lightfastness, weather stability and chemical resistance. Tight color tolerances and excellent dispersibility ensure reliable paint and coating formulation.</p> <p>The product families BAYFAST® and LEVANYL® of organic pigments and for clearcoats also MACROLEX® soluble dyes produce brilliant shades. They offer excellent tinting strength, lightfastness and weather stability.</p> <p><b>BAYFAST®</b></p> <p><b>MACROLEX®</b></p> <p><b>LEVANYL® LF</b></p> <p><b>LEVANOX® LF</b></p> <p>These organic yellow pigments with excellent lightfastness and weather stability and high tinting strength are used in high-grade coatings, such as for automotive and industrial applications.</p>
<b>BAYFAST®</b>	
BAYFAST® Yellow Y5688	Pigment Yellow 150 , azo nickel complex pigment powder, colorant in automotive and high-quality industrial coatings
<b>MACROLEX®</b>	Soluble MACROLEX® dyes are offered in various colors as easy-to-use granules for the formulation of brilliant clearcoats and pigmented coatings.
MACROLEX® Blue 3R GRAN	Anthraquinone
MACROLEX® Blue RR GRAN	Solvent Blue 97
MACROLEX® Fluorescent Yellow 10GN	Solvent Yellow 160:1
MACROLEX® Fluorescent Red G	Coumarin
MACROLEX® Yellow 3G GRAN	Solvent Yellow 93
MACROLEX® Yellow 6G GRAN	Solvent Yellow 179; D. Y. 201
MACROLEX® Yellow E2R GRAN	Quinophthalone
MACROLEX® Yellow G GRAN	Solvent Yellow 114; D. Y. 54
MACROLEX® Green 5B GRAN	Solvent Green 3
MACROLEX® Green G GRAN	Solvent Green 28
MACROLEX® Orange 3G GRAN	Solvent Orange 60
MACROLEX® Orange R GRAN	Solvent Orange 107; D. O. 47
MACROLEX® Red A	Dyestuff mixture ( New )
MACROLEX® Red 5B GRAN	Solvent Red 52
MACROLEX® Red B	Solvent Red 195
MACROLEX® Red E2G GRAN	Solvent Red 179
MACROLEX® Red EG GRAN	Solvent Red 135
MACROLEX® Red H	Azo
MACROLEX® Red Violet R GRAN	D. V. 31; D. V. 26; S. V. 59
MACROLEX® Violet 3B	Solvent Violet 13 ( does not soluble in Stearic Acid )
MACROLEX® Violet 3R GRAN	Solvent Violet 36
MACROLEX® Violet B GRAN	Solvent Violet 13 ( Solubility in Stearic Acid : 20 g/l at room temperature 23°C /73 °F)
<b>LEVANYL® LF</b>	are aqueous, solvent-free organic pigment preparations comprising selected high-grade organic pigments. LEVANYL® LF pigment preparations combine high brilliance lightfastness and excellent dosing properties.
LEVANYL® Blue BR-LF	<b>Pigment Blue 15 / 15:3</b>
LEVANYL® Blue G-LF	<b>Pigment Blue 15:3</b>
LEVANYL® Brown HS-LF 01	Mixture of Pigment Orange 34 / Pigment Yellow 74 / Pigment Black 7
LEVANYL® Carmine G-LF	Pigment Red 95
LEVANYL® Yellow 2GX-LF	Pigment Yellow 74 ( <b>Opaque</b> )
LEVANYL® Yellow 5GX-LF	Pigment Yellow 74 ( <b>Transparent</b> )
LEVANYL® Yellow E4G-A	Pigment Yellow 150 (azo-Ni-complex dispersion, content approx. 25% , <b>anionic</b> )
LEVANYL® Yellow GN-LF	Pigment Yellow 1
LEVANYL® Yellow HR-LF	Pigment Yellow 83
LEVANYL® Green G-LF	Pigment Green 7
LEVANYL® Orange GR-HS-LF	Pigment Orange 34
LEVANYL® Orange RN-LF 01	Pigment Orange 5
LEVANYL® Red BB-LF	Pigment Red 112
LEVANYL® Black A-SF	Pigment Black 7 (carbon black dispersion , pigment content approx. 28% , <b>anionic</b> )
LEVANYL® Black B-LF	Pigment Black 7 ( <b>neutral black</b> , pigment content approx. 38% , nonionic )
LEVANYL® Black C-LF	Pigment Black 7 ( <b>high color strength black</b> ,content approx. 40% ,nonionic )
LEVANYL® Black N-LF	Pigment Black 7 ( <b>green-shade black</b> , pigment content approx. 40% , nonionic )
LEVANYL® Violet BN-LF	Pigment Violet 23

LEVANYL® Blue R-LF	<b>Pigment Blue 15:0</b>
LEVANOX® LF	are aqueous, solvent-free inorganic pigment preparations comprising selected high-grade inorganic pigments with good resistance properties.
LEVANOX® Brown 610 LF	Mixture of Pigment Red 101 / Pigment Yellow 42 / Pigment Black 11 ( Bayferrox 610 )
LEVANOX® Yellow 1420 LF	Pigment Yellow 42 ( Bayferrox 1420 , red cast yellow )
LEVANOX® Yellow 3910 LF	Pigment Yellow 42 ( Bayferrox 3910LV , green cast yellow )
LEVANOX® Green G-LF	Pigment Green 17 ( Chrome Oxide Green GN-M )
LEVANOX® Red 130 LF	Pigment Red 101 ( Bayferrox 130 M )
LEVANOX® Black 303 LF	Pigment Black 33 ( Bayferrox 303T )
LEVANOX® Ultramarine 3113 LF	Pigment Blue 29 ( Ultramarine E 38 , 400 °C , Light Fastness : 8 )
LEVANOX® White R-LF	Pigment White 6 ( Bayertitan R-KB-2 )
<b>Powder Coatings</b>	
	<p>Powder coatings are becoming increasingly important as a modern coating technology. Because they contain no solvents and the overspray can be recycled almost fully in the coating process, powder coatings and the associated technology are very environmentally compatible.</p> <p>Powder coatings typically comprise three constituents: a binder, a hardener (also called a "crosslinker") and pigments. LANXESS, one of the leading suppliers of products for coatings and paints, offers beyond that Organic Dyes from the MACROLEX® range for this application.</p> <p>Powder coatings are used in a wide variety of applications such as in the furniture and automotive industries.</p> <p>They are also becoming increasingly popular for the manufacture of decorative metalwork and for appliances.</p> <p>Polyurethane powder coatings exhibit outstanding surface quality, excellent lightfastness, weather stability and chemical resistance and good mechanical properties.</p>
MACROLEX® Blue 3R GRAN	Anthraquinone
MACROLEX® Blue RR GRAN	Solvent Blue 97
MACROLEX® Fluorescent Yellow 10GN	Solvent Yellow 160:1
MACROLEX® Fluorescent Red G	Coumarin
MACROLEX® Yellow 3G GRAN	Solvent Yellow 93
MACROLEX® Yellow 6G GRAN	Solvent Yellow 179; D. Y. 201
MACROLEX® Yellow E2R GRAN	Quinophthalone
MACROLEX® Yellow G GRAN	Solvent Yellow 114; D. Y. 54
MACROLEX® Green 5B GRAN	Solvent Green 3
MACROLEX® Green G GRAN	Solvent Green 28
MACROLEX® Orange 3G GRAN	Solvent Orange 60
MACROLEX® Orange R GRAN	Solvent Orange 107; D. O. 47
MACROLEX® Red A	Dyestuff mixture ( New )
MACROLEX® Red 5B GRAN	Solvent Red 52
MACROLEX® Red B	Solvent Red 195
MACROLEX® Red E2G GRAN	Solvent Red 179
MACROLEX® Red EG GRAN	Solvent Red 135
MACROLEX® Red H	Azo
MACROLEX® Red Violet R GRAN	D. V. 31; D. V. 26; S. V. 59
MACROLEX® Violet 3B	Solvent Violet 13 ( does not soluble in Stearic Acid )
MACROLEX® Violet 3R GRAN	Solvent Violet 36
MACROLEX® Violet B GRAN	Solvent Violet 13 ( Solubility in Stearic Acid : 20 g/l at room temperature 23°C /73 °F)
<b>Coloration of Detergents ( Colorants )</b>	
	<p>LANXESS offers high-grade specialty dyes and pigment preparations for detergents and washing agents.</p> <p>Our products fully satisfy the demands of the detergents industry.</p> <p><b>Aqueous pigment preparations:</b></p> <p><b>LEVANYL® LF</b></p> <p><b>LEVANOX® LF</b></p> <p><b>PYRANIN</b></p> <p><b>Special dyes</b></p>

<b>LEVANYL® LF</b>	is a range of organic pigment preparations that are noted above all for their fine dispersion and high transparency.
<b>LEVANYL® Blue BR-LF</b>	<b>Pigment Blue 15 / 15:3</b>
<b>LEVANYL® Blue G-LF</b>	<b>Pigment Blue 15:3</b>
<b>LEVANYL® Brown HS-LF 01</b>	Mixture of Pigment Orange 34 / Pigment Yellow 74 / Pigment Black 7
<b>LEVANYL® Carmine G-LF</b>	Pigment Red 95
<b>LEVANYL® Yellow 2GX-LF</b>	Pigment Yellow 74 ( <b>Opaque</b> )
<b>LEVANYL® Yellow 5GX-LF</b>	Pigment Yellow 74 ( <b>Transparent</b> )
<b>LEVANYL® Yellow E4G-A</b>	Pigment Yellow 150 (azo-Ni-complex dispersion, content approx. 25% , <b>anionic</b> )
<b>LEVANYL® Yellow GN-LF</b>	Pigment Yellow 1
<b>LEVANYL® Yellow HR-LF</b>	Pigment Yellow 83
<b>LEVANYL® Green G-LF</b>	Pigment Green 7
<b>LEVANYL® Orange GR-HS-LF</b>	Pigment Orange 34
<b>LEVANYL® Orange RN-LF 01</b>	Pigment Orange 5
<b>LEVANYL® Red BB-LF</b>	Pigment Red 112
<b>LEVANYL® Black A-SF</b>	Pigment Black 7 (carbon black dispersion , pigment content approx. 28% , <b>anionic</b> )
<b>LEVANYL® Black B-LF</b>	Pigment Black 7 ( <b>neutral black</b> , pigment content approx. 38% , nonionic )
<b>LEVANYL® Black C-LF</b>	Pigment Black 7 ( <b>high color strength black</b> ,content approx. 40% ,nonionic )
<b>LEVANYL® Black N-LF</b>	Pigment Black 7 ( <b>green-shade black</b> , pigment content approx. 40% , nonionic )
<b>LEVANYL® Violet BN-LF</b>	Pigment Violet 23
<b>LEVANYL® Blue R-LF</b>	<b>Pigment Blue 15:0</b>
<b>LEVANOX® LF</b>	is a range of inorganic pigment preparations with high hiding power.
<b>LEVANOX® Brown 610 LF</b>	Mixture of Pigment Red 101 / Pigment Yellow 42 / Pigment Black 11 ( Bayferrox 610 )
<b>LEVANOX® Yellow 1420 LF</b>	Pigment Yellow 42 ( Bayferrox 1420 , red cast yellow )
<b>LEVANOX® Yellow 3910 LF</b>	Pigment Yellow 42 ( Bayferrox 3910LV , green cast yellow )
<b>LEVANOX® Green G-LF</b>	Pigment Green 17 ( Chrome Oxide Green GN-M )
<b>LEVANOX® Red 130 LF</b>	Pigment Red 101 ( Bayferrox 130 M )
<b>LEVANOX® Black 303 LF</b>	Pigment Black 33 ( Bayferrox 303T )
<b>LEVANOX® Ultramarine 3113 LF</b>	Pigment Blue 29 ( Ultramarine E 38 , 400 °C , Light Fastness : 8)
<b>LEVANOX® White R-LF</b>	Pigment White 6 ( Bayertitan R-KB-2 )
<b>PYRANIN</b>	is a top-class product with outstanding fluorescence (yellow in aqueous detergents).
Pyranine 120%	<b>S.G. 7</b> , Strongly fluorescent yellow powder dye for alkaline cleaning agents, dishwashing detergents, shampoos, soaps
<b>Special dyes</b>	LANXESS also has a broad range of dyes for detergent applications.
Special Brilliant Blue FFR liq 40% 01	<b>A. BI. 104</b> , Brilliant, red shade blue dye, supplied as 10 % aqueous solution. Very low salt content. For acidic and alkaline cleaning agents,soaps and detergents.
SPECIAL Orange GX-S powder	<b>A.O. 10</b> , Yellow shade orange powder dye for alkaline and acidic cleaning agents and toilet soaps.
SPECIAL Turquoise Blue AE powder	<b>A. BI. 9</b> , Brilliant, green shade blue powder dye. Especially suitable for liquid detergents. For neutral and acidic cleaning agents, soaps.
SPECIAL Violet S4B-F 02 powder	<b>A. V. 17</b> , Brilliant, red shade violet powder dye for fabric softeners, soaps.
<b>Crop Protection ( Colorants )</b>	
<b>LEVANYL® LF</b>	LANXESS is an experienced, long-time partner to companies in the agrochemicals sector, for which it markets the following products:  <b>LEVANYL® LF</b>  <b>LEVANOX® LF</b>  This range comprises solvent-free organic pigment preparations that yield high transparency through their fine dispersion.
<b>LEVANYL® Blue BR-LF</b>	<b>Pigment Blue 15 / 15:3</b>
<b>LEVANYL® Blue G-LF</b>	<b>Pigment Blue 15:3</b>
<b>LEVANYL® Brown HS-LF 01</b>	Mixture of Pigment Orange 34 / Pigment Yellow 74 / Pigment Black 7
<b>LEVANYL® Carmine G-LF</b>	Pigment Red 95
<b>LEVANYL® Yellow 2GX-LF</b>	Pigment Yellow 74 ( <b>Opaque</b> )
<b>LEVANYL® Yellow 5GX-LF</b>	Pigment Yellow 74 ( <b>Transparent</b> )
<b>LEVANYL® Yellow E4G-A</b>	Pigment Yellow 150 (azo-Ni-complex dispersion, content approx. 25% , <b>anionic</b> )
<b>LEVANYL® Yellow GN-LF</b>	Pigment Yellow 1
<b>LEVANYL® Yellow HR-LF</b>	Pigment Yellow 83
<b>LEVANYL® Green G-LF</b>	Pigment Green 7

LEVANYL® Orange GR-HS-LF	Pigment Orange 34
LEVANYL® Orange RN-LF 01	Pigment Orange 5
LEVANYL® Red BB-LF	Pigment Red 112
LEVANYL® Black A-SF	Pigment Black 7 (carbon black dispersion , pigment content approx. 28% , <b>anionic</b> )
LEVANYL® Black B-LF	Pigment Black 7 ( <b>neutral black</b> , pigment content approx. 38% , nonionic )
LEVANYL® Black C-LF	Pigment Black 7 ( <b>high color strength black</b> ,content approx. 40% ,nonionic )
LEVANYL® Black N-LF	Pigment Black 7 ( <b>green-shade black</b> , pigment content approx. 40% , nonionic )
LEVANYL® Violet BN-LF	Pigment Violet 23
LEVANYL® Blue R-LF	<b>Pigment Blue 15:0</b>
<b>LEVANOX® LF</b>	
	is a solvent-free range of inorganic pigment preparations with high hiding power.
LEVANOX® Brown 610 LF	Mixture of Pigment Red 101 / Pigment Yellow 42 / Pigment Black 11 ( Bayferrox 610 )
LEVANOX® Yellow 1420 LF	Pigment Yellow 42 ( Bayferrox 1420 , red cast yellow )
LEVANOX® Yellow 3910 LF	Pigment Yellow 42 ( Bayferrox 3910LV , green cast yellow )
LEVANOX® Green G-LF	Pigment Green 17 ( Chrome Oxide Green GN-M )
LEVANOX® Red 130 LF	Pigment Red 101 ( Bayferrox 130 M )
LEVANOX® Black 303 LF	Pigment Black 33 ( Bayferrox 303T )
LEVANOX® Ultramarine 3113 LF	Pigment Blue 29 ( Ultramarine E 38 , 400 °C , Light Fastness : 8)
LEVANOX® White R-LF	Pigment White 6 ( Bayertitan R-KB-2 )
<b>Dyes for special dyeing applications ( Colorants )</b>	
	<p>LANXESS has an extensive range of specialty dyes for the requirements of various industrial applications.</p> <p>Our range contains well-chosen water-soluble dyes with high purity (BAYSCRIPT® and Special), water and solvent soluble phenazine dyes (Nigrosine) as well as solvent dyes.</p> <p>Products for selected applications are for example:</p> <p><b>PYRANIN</b></p> <p><b>Special Turquoise AE powder</b></p> <p><b>Special Red E1171R liq.,</b></p> <p><b>ASTRA™ Blue Base 6GGL</b></p> <p><b>MACROLEX®</b></p> <p><b>Nigrosine W liq.,</b></p> <p><b>Nigrosine Base BA and BAP,</b></p>
<b>PYRANIN</b>	Pyranin 120%, a brilliant, strongly fluorescent yellow dye for the coloring of liquid cleaners and the marking of water cycles
<b>Special Turquoise AE powder</b>	Special Turquoise AE powder, a brilliant blue dye for the coloring of liquid cleaners
<b>Special Red E1171R liq.,</b>	Special Red E1171R liq., a red dye for the coloring of glass wool
<b>ASTRA™ Blue Base 6GGL</b>	ASTRA™ Blue Base 6GGL powder and Special Red 3R powder, solvent dyes for the coloration of wire coatings
<b>MACROLEX®</b>	Smoke Orange R Gran, MACROLEX® Red G Gran, Yellow 3 G Gran, Green 5 B Gran, Blue RR Gran, Violet B Gran, low dusting solvent dyes for the production of smoke signals
<b>Nigrosine W liq.,</b>	Nigrosine W liq., a universally applicable black phenazine dye (C.I. Acid Black 2) for the coloring of, for example, phenolic resins for laminated wood
<b>Nigrosine Base BA and BAP,</b>	Nigrosine Base BA and BAP, solvent soluble black phenazine dyes (C.I. Solvent Black 7) for the coloring of, for example, polyamide masterbatches
<b>Application ( Polymer Additives )</b>	
	<p>Plastic additives can be used in many different applications. Depending on the polymer, production process and finished product the suitable additive may change.</p> <p>Here you find a selection of application examples. Additionally the product scout offers you product recommendations for your individual requirements.</p> <p><b>Polyvinyl chloride (PVC)</b></p> <p><b>Thermoplastics</b></p> <p><b>Polyurethanes (PU)</b></p>

	<p><b>Elastomers</b></p> <p><b>Other applications</b></p>
	<b>Polyvinyl chloride (PVC)</b>
<b>Cables</b>	<p>Polyvinyl chloride (PVC) is a polymer based on vinyl chloride monomer. Because of its favorable cost- to-benefit ratio, PVC has become one of the biggest commodity plastics in the world.</p> <p>can become quite warm in normal use and in the event of a short-circuit they may grow extremely hot. They therefore pose a significant fire hazard.</p> <p>For cables that are not flame retardant but have to demonstrate high resistance to oil and grease, Ultramoll® is especially suitable.</p>
Ultramoll® III	Medium-viscosity polymer plasticizer for oil and grease-resistant applications of PVC, NBR and other polymers - Adipic polyester.
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) - Adipic polyester.
<b>Children's toys</b>	<p>such as dolls and balls are manufactured by rotational molding, where a PVC plastisol is poured into a mold and fused by rotating it around every axis.</p> <p>This method produces blow molded articles with excellent surface quality, and can even be used for complicated shapes. In this way dolls are given their distinctive facial expression and even tiny details such as fingernails can be easily reproduced.</p>
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuffregulations - Adipic polyester
Unimoll® AGF	Unimoll AGF is a yellowish mixture of glycerine acetates developed mainly for plasticising PVC.
<b>Cling films</b>	<p>are the ideal packaging for foods, especially meat, as they are able to adhere both to the packaging tray and to the film itself.</p> <p>This cling effect can be obtained with Ultramoll® and Unimoll®. These plasticizers are perfect for manufacturing PVC cling films because they have been granted the necessary food contact approvals.</p>
Ultramoll® III	Medium-viscosity polymer plasticizer for oil and grease-resistant applications of PVC, NBR and other polymers; especially suitable for the manufacture of packaging film; complies with many foodstuffs regulations - Adipic polyester
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuffregulations - Adipic polyester
Unimoll® AGF	Unimoll AGF is a yellowish mixture of glycerine acetates developed mainly for plasticising PVC.
<b>Conveyor belts</b>	<p>used in industry or at airports for luggage transport, for example, are largely made from plasticized PVC.</p> <p>The basic structure comprises a synthetic fabric coated with plasticized PVC.</p> <p>In order to ensure good adhesion between the PVC anchor coat and the fabric, a product such as Bonding Agent 2001, 2005 or 2007 must be added to the PVC anchor coat.</p> <p>Ultramoll® III is suitable for use as a plasticizer for conveyor belts intended for the transport of foodstuffs because it is approved for a whole range of food contact applications.</p>
Bonding Agent 2005	Bonding agent (butylacetate carrier) for the coating of polyester and polyamide substrates with PVC plastisols - Aromatic polyisocyanurate
Bonding Agent TN/N	Bonding agent component (ethylacetate carrier) for the coating of polyester and polyamide substrates with PVC plastisols - Hydroxyl-group-containing polyester
Bonding Agent TP LXS 51030	is a solvent-free one-component bonding agent used to improve the adhesion of PVC plastisol coatings to substrates made of polyester or polyamide.
Bonding Agent TP LXS 51066	Phthalate- and solventfree one component - bonding agent based on Mesamoll II.
Bonding Agent TP LXS 51099	is a high performance phthalate- and solvent free one component bonding agent used to improve the adhesion of PVC plastisol coatings to substrates made of polyester or polyamide. Bonding Agent TP LXS 51099 has moderate viscosity and therefore ease to handle during processing. Bonding Agent TP LXS 51099 is a formulation in Isononylbenzoate
Pot-life Enhancer 9142	delays the chemical reaction and crosslinking of isocyanates and isocyanurates

	at room temperature.
Ultramoll® III	Medium-viscosity polymer plasticizer for oil and grease-resistant applications of PVC, NBR and other polymers - Adipic polyester.
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuff regulations - Adipic polyester
Ultramoll® IV HV	is a high viscosity polymeric plasticiser for a large number of polymers.
Ultramoll® M NV	is a low viscosity reactive polyester.
<b>PVC floor coverings</b>	
	are cost-efficient and can be used in both domestic and industrial settings in areas subjected to heavy loads.  Many floor coverings are foamed to improve damping. The blowing agent Porofor® ADC/M-C1 is easily dispersed and produces a fine cell structure.  The Genitron® LE and SCE grades are extremely well activated, allowing production to take place at high processing speeds or relatively low temperatures.
Genitron® DL	Highly activated ADC for foaming of PVC plastisols - Azodicarbonamide preparation
Genitron® LE	Highly activated ADC formulation with a low decomposition temperature for processing with extremely short cycle times such as with floorcovering backing foams.
Genitron® SCE	Highly activated ADC formulation with good dispersibility and a low decomposition temperature; especially suitable for chemical embossing.
<b>Furniture surfaces</b>	
	are commonly finished with PVC films. This makes them durable and easy to care for and offers great design flexibility.  Furniture films usually have an adhesive backing, so the plasticizers must be particularly migration resistant.  Migration into the adhesive layer would cause the film to lift.  The polymeric plasticizers Ultramoll® III and Ultramoll® IV are especially migration resistant, guaranteeing long-term adhesion of the films.
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuff regulations - Adipic polyester
<b>Gloves</b>	
	are used wherever there is a need to protect both hands and objects (such as food).  Disposable vinyl gloves are worn to enable highly perishable goods etc. to be prepared, divided into portions and packed under hygienic conditions.  These gloves are manufactured by dip molding, a process in which a preheated mold is dipped in a paste (plasticizer + PVC) which partly gels after slow withdrawal and then gels to form gloves after further heating.  A plasticizer is required for this application.
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuff regulations - Adipic polyester
<b>Interior film / trim</b>	
	is used in cars for backrest trim, door trim and on the instrument panel.  Plasticized PVC foamed leathercloth is often used for backrest trim.  Suitable blowing agents for this application include Porofor® ADC/M-C1 or the activated grades *Genitron® LE and SCE.  Mesamoll® can be used as plasticizer: it exhibits good gelling power, permitting a low processing temperature or very high processing speeds.  Modified PVC films are commonly used for instrument panel trim.  Fogging is caused by the evaporation of volatile polymer components in the car interior, which then settle on windows and other surfaces.
Baymod® A 60	Modifier for the manufacture of semi-rigid PVC thermoformable film - ABS graft polymer
Baymod® A 80	Modifier for the manufacture of semi-rigid PVC thermoformable film - SAN copolymer
Genitron® LE	Highly activated ADC formulation with a low decomposition temperature for processing with extremely short cycle times such as with floorcovering backing foams.

Genitron® SCE	Highly activated ADC formulation with good dispersibility and a low decomposition temperature; especially suitable for chemical embossing.
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
<b>Luggage and seat coverings</b>	<p>are frequently made not from leather but from PVC leathercloth.</p> <p>Compared with the natural material, the manufacture of leathercloth is far easier and cheaper, and the appearance and other qualities of leather need not be sacrificed.</p> <p>PVC leathercloth is embossed with a leather grain effect and is resistant to aging, light and heat.</p> <p>A matt surface and pleasant feel can be achieved.</p> <p>PVC leathercloth is coated with a layer of foaming agent, which can be expanded with Porofo® ADC/M-C1 or the activated grades *Genitron® LE or SCE.</p> <p>Mesamoll® can be used as plasticizer, which offers very good gelling power, low processing temperature or fast processing speed.</p> <p>If Mesamoll® is used, its good saponification resistance makes the article extremely durable, even in outdoor use.</p>
Genitron® LE	Highly activated ADC formulation with a low decomposition temperature for processing with extremely short cycle times such as with floorcovering backing foams.
Genitron® SCE	Highly activated ADC formulation with good dispersibility and a low decomposition temperature; especially suitable for chemical embossing.
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
<b>Profiles and pipes</b>	<p>made from rigid PVC are commonly used in the construction industry. Rigid PVC is very notch-sensitive.</p> <p>For underground pipes or internal cable ducts, Baymod® A 52 can be used to make the material highly impact resistant, even at low temperatures.</p> <p>Blowing agents help to save on materials and reduce weight.</p> <p>The core of the pipe is expanded with products from the *Genitron® EP or Porofo® ADC/M-C1 ranges, while a second extrusion unit is used to co-extrude the inner and outer skin without the use of blowing agents.</p> <p>This produces a compact inner and outer skin that is absolutely smooth and leakproof and an expanded core that cuts down on weight and materials.</p> <p>The Celuka method produces expanded profiles (not pipes) from a single extrusion line with no co-extrusion.</p> <p>In this case the inner and outer skin is still compact because the production process involves very rapid cooling of the skin, preventing it from expanding.</p>
Baymod® AT 49	Modifier to improve heat resistance and flexibility of rigid PVC - ABS graft polymer
Baymod® AT 68	A lightfast and weather resistant modifier for improving the heat resistance of rigid PVC - SAN copolymer
Baymod® A 52	Impact modification of rigid PVC - ABS graft polymer
Genitron® EPA	Plate-out minimizing ADC-preparation, typical processing temperature is 200-230 °C
Genitron® EPE	Highly activated ADC/OBSH preparation for the injection molding and extrusion of thermoplastics, especially rigid PVC (freefoam, Celuka).
Genitron® VP SP 51014	Modified ADC in masterbatch form for use in chemically crosslinked PE foam - 40 % Azodicarbonamide preparation in LDPE
<b>Roofing Membranes</b>	<p>Plasticized PVC roofing membranes for flat roofs are continuously exposed to rain and to extremes of heat or cold.</p> <p>This is where the plasticizer Mesamoll® comes into its own. Its outstanding saponification resistance and weathering resistance ensure that the roof remains watertight for years.</p>
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.

<b>Sealing profiles</b>	<p>are found in many different places on a car - on the doors, tailgate, windows or sunroof.</p> <p>These unobtrusive assistants fulfill many different functions: they act as a seal and protect against injuries on corners and edges, they have to be flexible yet still display good dimensional stability, and they must adhere well to edges and not slip off.</p> <p>If sealing profiles are reinforced with metal supports, the profiles have to be flexible but at the same time the polymer blend must not display too much elongation.</p> <p>This is because the metal inserts have to break at the predetermined breaking points when they are bent around corners during installation.</p> <p>Porofor® ADC/M-C1 is a suitable foaming agent for this application.</p> <p>It is readily dispersible and produces a fine cell structure and a smooth surface, which is important for achieving a good seal. *Genitron® ACR can also be used here.</p>
<b>Genitron® ACR</b>	<b>ADC/TSH preparation with high gas yield at low processing temperatures</b>
<b>Shoe soles</b>	<p>are frequently manufactured from plasticized PVC.</p> <p>Its advantages include low cost as well as reduced weight and material usage in the case of foamed soles (using Porofor® ADC/M-C1 or *Genitron® SCE).</p> <p>For soles designed for industrial use, the addition of plasticizers such as Baymod® PU can make the soles resistant to alkaline solutions, acids, oils, greases and chemicals as well as ensuring that they are resistant to abrasion.</p>
<b>Genitron® SCE</b>	Highly activated ADC formulation with good dispersibility and a low decomposition temperature; especially suitable for chemical embossing.
<b>Mesamoll®</b>	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
<b>Textured Wallpapers</b>	<p>made from plasticized PVC are used for noise reduction and impact absorption, and they are expanded to reduce weight. Porofor® ADC/M-C1, ADC/L-C2 are used as blowing agents for expansion as they are easy to process and produce very white foams.</p> <p>*Genitron® SCE is a pre-activated blowing agent which is particularly suitable for chemically textured wallpapers.</p> <p>The standard grades Porofor® ADC/M-C1, ADC/L-C2 and VP KA 9185 are also very suitable as they are readily activated, easy to process and produce white foams.</p>
<b>Genitron® DL</b>	<b>Highly activated ADC for foaming of PVC plastisols - Azodicarbonamide preparation</b>
<b>Genitron® LE</b>	Highly activated ADC formulation with a low decomposition temperature for processing with extremely short cycle times such as with floorcovering backing foams.
<b>Genitron® SCE</b>	Highly activated ADC formulation with good dispersibility and a low decomposition temperature; especially suitable for chemical embossing.
<b>Thermally Insulated Jackets</b>	<p>Heating pipes clad in thermally insulated jackets lose very little energy and so save money.</p> <p>These insulators are manufactured from blends of NBR and PVC</p>
<b>Truck tarpaulins</b>	<p>have to be flexible and lightweight; they protect the load and also serve as an advertising medium. They are exposed to weathering with extreme temperature variations.</p> <p>The tarpaulins are made from polyester or polyamide fabrics coated with plasticized PVC.</p> <p>Good adhesion of the anchor coat to the synthetic fabric can only be achieved by adding a bonding agent.</p> <p>If Mesamoll® is used as a plasticizer for the PVC paste, the very good gelling capacity means that the processing temperature can be kept fairly low.</p> <p>In subsequent use the tarpaulins demonstrate excellent durability, because Mesamoll is extremely resistant to saponification.</p>
<b>Bonding Agent 2005</b>	<b>Bonding agent (butylacetate carrier) for the coating of polyester and polyamide substrates with PVC plastisols - Aromatic polyisocyanurate</b>
<b>Bonding Agent TN/N</b>	Bonding agent component (ethylacetate carrier) for the coating of polyester and polyamide substrates with PVC plastisols - Hydroxyl-group-containing polyester
<b>Bonding Agent TP LXS 51030</b>	is a solvent-free one-component bonding agent used to improve the adhesion of PVC plastisol

Bonding Agent TP LXS 51066	coatings to substrates made of polyester or polyamide.
Bonding Agent TP LXS 51099	Phthalate- and solventfree one component - bonding agent based on Mesamoll II. is a high performance phthalate- and solvent free one component bonding agent used to improve the adhesion of PVC plastisol coatings to substrates made of polyester or polyamide. Bonding Agent TP LXS 51099 has moderate viscosity and therefore ease to handle during processing. Bonding Agent TP LXS 51099 is a formulation in Isononylbenzoate
Pot-life Enhancer 9142	delays the chemical reaction and crosslinking of isocyanates and isocyanurates at room temperature.
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
<b>Thermoplastics</b>	
<b>Housing for Electrical Appliances</b>	Electrical appliances such as televisions, computers and photocopiers pose a high fire risk, which means that the casing must be made flame retardant.  <b>Disflamoll® TP</b> is particularly suitable for casings made from ABS (Novodur®) or PC + ABS (Bayblend® ), possibly in combination with other flame retardants.
<b>Disflamoll®TP</b>	Triphenyl phosphate
	Blowing agents are used in the production of bulky components (casings) to prevent the formation of sink marks during the injection molding process.  Different products are used for different processing temperatures: products from the Genitron® EP range for ABS, and Genitron® UN 30 or Genitron® AFA for PC + ABS.
<b>Genitron® EPA</b>	Plate-out minimizing ADC-preparation, typical processing temperature is 200-230 °C
Genitron® UN-30	Masterbatch of an endo/exothermic blowing agent for the injection moulding of thermoplastics - 30 % blowing agent preparation in EVA
<b>Injection Moulded Articles</b>	Injection molding is the discontinuous manufacture of (injection-) molded parts by mechanically pressing macromolecular molding compounds into a mold.  Injection-molded articles are all around us and it is difficult to imagine life without them these days.  Examples include housing for electronic devices such as computers or domestic appliances, boxes for storage or transportation, switches and plugs.  The use of chemical blowing agents such as Porofor® and Genitron® results in the formation of a foam structure which can considerably reduce the amount of material used and the weight of the injection-molded part.  Even small amounts of Porofor® and Genitron® create smooth surfaces without sink marks.
<b>Genitron® UN-30</b>	Masterbatch of an endo/exothermic blowing agent for the injection moulding of thermoplastics - 30 % blowing agent preparation in EVA
Genitron® VP KA 9174	60% Genitron® VP KA 9175 in EVA
<b>Picture Frame</b>	Thermoplastic foam extrudates such as picture frame profiles manufactured with Porofor® and Genitron® are characterized by their light weight, low material costs and ease of fabrication.  The foam structure of the continuous profiles makes them highly suitable for processes used with wood such as sawing, boring and screwing, making the frames easier to manufacture
<b>Genitron® DP 35/22</b>	Endothermal blowing agent preparation for fine-particle foam
Genitron® EPB	Activated plate-out minimizing ADC-preparation, typical processing temperature is 170-225 °C
<b>Sheets</b>	generally consist of carpet with a foam backing, which absorbs any impact and vibration, protecting the load from damage.  Crosslinked polyethylene foams are suitable for use as foam backings.
<b>Polyurethanes (PU)</b>	
<b>Insulating plates</b>	made from rigid polyurethane foams are very good insulators for buildings.  Since there are stringent fire protection regulations in force in the building sector, any products used must demonstrate low flammability.

	Developed specifically for this purpose, flame retardants from Lanxess range are added to the rigid polyurethane foam to produce products that are both safe and energy-efficient.
Levagard® 4090 N	Reactive flame retardant, e.g. for PF resins, epoxy resins, unsaturated polyester resins or PU foams - N,N-Dihydroxyethylaminomethane phosphonic diethyl ester
Levagard® PP	Flame retardant for PU rigid foam and other thermosets - Trischlorisopropyl phosphate
Levagard® TEP-Z	Flame retardant for PU rigid foam, especially suitable for reducing the viscosity of highly viscous polyol formulations - Triethyl phosphate
<b>Purging, Testing and Sealing Fluid</b>	
	Plasticizing substances are often used to maintain and clean polymer-producing plant and machinery.  A typical example is the use of Mesamoll® as a purging and testing fluid in reaction injection molding (RIM) machines for polyurethane production.
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
<b>Sealing compounds</b>	
	are used in the construction sector for sealing joints, for example.  Mesamoll® is ideal for polyurethane sealing compounds, being very compatible with polyurethane and producing extremely weather-resistant sealing compounds.  Energy-efficient insulated glass windows are filled with an insulating gas such as argon.  The window cavity is sealed with polysulfide-based sealing compounds to prevent the gas from escaping and moisture from entering.  As a plasticizer Ultramoll® ensures that the sealing compound remains flexible and retains its good adhesion to glass and aluminum.  Ultramoll® also displays low migration, which means that the window will remain clear for years to come.
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuff regulations - Adipic polyester
<b>Elastomers</b>	
<b>Beach Sandals, Pram Tyres</b>	
	Genitron® make footwear such as beach sandals, sports, leisure and work shoes much more comfortable to wear.  The foam structure produced by these chemical foaming agents improves the cushioning properties and softness of the soles.  Another advantage of low-density porous soles which should not be neglected is that their light weight puts less permanent strain on the legs.
Genitron® ACR	ADC/TSH preparation with high gas yield at low processing temperatures
<b>Diving- and Surfsuit</b>	
	Flexible, closed-cell Baypren® foam rubber (chloroprene) provides excellent insulation against cold and heat.  It is therefore suitable for manufacturing diving and surf suits.  Blowing agents such as Porofor® and Genitron® are ideal for achieving this closed-cell, insulating foam structure.  These chemical blowing agents have good dispersion properties and produce an even cell structure.  Low-density diving and surf suits manufactured with Porofor® and Genitron® have a soft feel and fit snugly to the shape of the body.  Other applications for expanded foam rubber sheets based on Baypren® can be found in the construction, motor and instrumentation sectors
Genitron® E4-75	Masterbatch; 75 % Azodicarbonamide in universal rubber carrier
<b>Rubber Sealings</b>	

Genitron® ACR	ADC/TSH preparation with high gas yield at low processing temperatures
Genitron® ER-75	Masterbatch; 75 % Genitron® ACR in a universal rubber carrier
Genitron® OB	OBSH powder with low decomposition temperatures for light foams
<b>Synthetic Rubber</b>	
	<p>Synthetic Rubber Plasticizers used in the rubber industry have three possible functions, one or more of which may be applicable: as processing aid, as extenders (to reduce compound cost), as active ingredients capable of imparting special properties to vulcanizates.</p> <p>Blowing agents for rubber, like Porofor® ADC/M-C1, decompose either just before or during the cure.</p> <p>This gives the material a porous or cellular structure and a low specific gravity.</p>
Adimoll® BO	Highly effective plasticizer for low-temperature-resistant applications of plasticized PVC, NBR, SBR and other polymers - Benzyl-(2-ethylhexyl) adipate
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
<b>Emulsifier</b>	
	Emulsifiers - emulsifiers are surface-active additives, which are used for emulsion polymerisations, and as raw materials for textile processing chemicals, leather auxiliaries, detergents and cleaning products.
Mersolat® H	Emulsifier for the manufacture and stabilisation of polymer emulsions
Mersolat® L	Synthetic raw material for the production of high-value leather auxiliary products
<b>Other applications</b>	
<b>Adhesives</b>	<p>Adhesion is one of the oldest ways of joining two materials together.</p> <p>Various adhesive systems are used, depending on the combination of materials.</p> <p>Polyurethane-based adhesives, particularly moisture-curing one-component systems, often contain Mesamoll® and Mesamoll® II, which are used in the construction industry among other applications.</p> <p>Mesamoll® and Mesamoll® II are characterized by good saponification resistance.</p>
Acetine TP LXS 51035	Technical Glyceroltriacetate for adhesives, in particular based on polyvinylacetate, ethylenevinylacetate and acrylates.
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
Mesamoll® II	High-solvating, saponification-resistant and highly compatible plasticizer for a large number of polymers - Alkyl sulfonate of phenol
<b>Carrier for Flavour and Essence Concentrates</b>	
	Because it is approved for food contact applications and is tasteless and odorless, Triacetin is used as a carrier for flavor and essence concentrates in the food and drink industry.
Acetine TP LXS 51035	Technical Glyceroltriacetate for adhesives, in particular based on polyvinylacetate, ethylenevinylacetate and acrylates.
Triacetin	Plasticizer for the bonding of celluloseacetate fibers in the manufacture of cigarette filters; carrier for flavorings - Glycerin triacetate
<b>Filter Tub</b>	
	<p>Filter tubs are made from cellulose triacetate tow (tiny fibers).</p> <p>These are bonded together by spraying Triacetin onto the fibers.</p> <p>This also gives the filter tub a certain hardness and a smooth surface.</p> <p>Certain hardnesses can be achieved by mixing Triacetin with Tegda.</p>
Triacetin	Plasticizer for the bonding of celluloseacetate fibers in the manufacture of cigarette filters; carrier for flavorings - Glycerin triacetate
<b>Lacquers / Paints</b>	
	<p>Ultramoll® III, Ultramoll® IV and Unimoll AGF has proved a suitable additive for oil-resistant paints containing physically drying binders such as cellulose esters or nitrocellulose.</p> <p>These products are suitable for applications for Food Contact Coatings Applications.</p>

Ultramoll® III	Medium-viscosity polymer plasticizer for oil and grease-resistant applications of PVC, NBR and other polymers - Adipic polyester.
Ultramoll® IV	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuff regulations - Adipic polyester
Unimoll® AGF	Unimoll AGF is a yellowish mixture of glycerine acetates developed mainly for plasticising PVC.
<b>Oil Additive, Metal Cutting Oil</b>	<p>Organic phosphorus compounds such as our Disflamoll® products are used as additives in a wide range of lubricants and hydraulic fluids.</p> <p>Disflamoll® TKP is added to lubricant oils to reduce material wear in moving parts which rub together.</p> <p>Disflamoll® TOF is used as a cutting oil. It prevents fusing during metal cutting processes and prolongs tool life.</p>
Disflamoll® TKP	Flame retardant with plasticizing properties for PVC, phenolic resin and films - Tricresyl phosphate
Disflamoll® TOF	Low-temperature plasticizer for PVC, NBR and PU with a flame retardant effect, liquid substrate for pigments and dyestuffs - Tris-(2-ethylhexyl) phosphate
<b>Photo Film</b>	<p>Our products are used in several areas associated with photo films.</p> <p>Adding Disflamoll® TP gives the cellulose acetate (CA) backing film the necessary hydrophobic characteristics for the developer solutions to roll off quickly and completely during film processing.</p> <p>Disflamoll® TKP is used as a carrier substance for photo chemicals.</p> <p>Excellent dissolving power, consistent quality and good compatibility with the film substrate are the most important criteria for this application.</p> <p>Because the quality of the carrier substance also affects the colors in the picture.</p>
Disflamoll® TKP	Flame retardant with plasticizing properties for PVC, phenolic resin and films - Tricresyl phosphate
<b>Pigment Batches</b>	<p>Pigments and other polymer additives are often supplied in the form of solid, very fine-particle raw materials which are also often dusting.</p> <p>Handling dusts in a factory setting is always a problem. Dusts are difficult to transport and dispense.</p> <p>They are often explosive or harmful if inhaled.</p> <p>Liquid is therefore added to form a non-dusting paste which is easy to dispense.</p> <p>The carrier substances used for this must have good wetting effects on the solid product and must not react with it, the aim being to achieve a high solid content with low viscosity.</p> <p>The carrier substances must be highly compatible with the polymers and must not affect their properties.</p>
Disflamoll® TOF	Low-temperature plasticizer for PVC, NBR and PU with a flame retardant effect, liquid substrate for pigments and dyestuffs - Tris-(2-ethylhexyl) phosphate
<b>Printing Inks</b>	<p>Printing inks based on PVC pastes, as used for printing on textiles such as T-shirts, adhere better to the material if an additive such as Mesamoll® is used.</p> <p>The processing characteristics of such pastes can also be improved by adding this product, which produces a more consistent paste viscosity.</p> <p>For printing inks based on solvents, as used in ink jet printers, our products can be used as carrier substances as an alternative to solvents. They are less volatile and cleaner to use.</p>
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
Mesamoll® II	High-solvating, saponification-resistant and highly compatible plasticizer for a large number of polymers - Alkyl sulfonate of phenol
<b>Purging, Testing and Sealing Fluid</b>	<p>Plasticizers are often used for purging and cleaning of polymer production facilities.</p> <p>A typical example is the use of Mesamoll® as a purging fluid for PU production equipment.</p>
Mesamoll®	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC,

	polyurethanes and rubber.
<b>Sealing compounds</b>	<p>are used in the construction sector for sealing joints, for example.</p> <p>Mesamoll® is ideal for polyurethane sealing compounds, being very compatible with polyurethane and producing extremely weather-resistant sealing compounds.</p> <p>Energy-efficient insulated glass windows are filled with an insulating gas such as argon.</p> <p>The window cavity is sealed with polysulfide-based sealing compounds to prevent the gas from escaping and moisture from entering.</p> <p>As a plasticizer Ultramoll® ensures that the sealing compound remains flexible and retains its good adhesion to glass and aluminium.</p> <p>Ultramoll® also displays low migration, which means that the window will remain clear for years to come.</p>
<b>Mesamoll®</b>	is a phthalat-free general purpose plasticiser with a good gelling behaviour and an exceptional saponification resistance. It is compatible with many types of polymers including PVC, polyurethanes and rubber.
<b>Ultramoll® IV</b>	High viscosity polymeric plasticiser for the production of films based on polyvinyl chloride (PVC) complies with many foodstuff regulations - Adipic polyester
<b>Baypure</b>	
	<p>Baypure® products are based on nature. Consequently, they have rapid biodegradability and a good ecotoxicological profile.</p> <p>Optimum use can be made of production synergies as both products are manufactured from the same raw materials: maleic anhydride, ammonia and caustic soda solution.</p> <p>Special attention was paid to developing production processes with closed product streams.</p> <p>Excess raw materials and process water are returned to the production cycle.</p> <p><b>Baypure® DSP</b></p> <p><b>Baypure® DS100</b></p> <p><b>Baypure® CX100</b></p> <p><b>Tetrasodium Iminodisuccinate</b> <b>Sodium polyaspartat solid</b></p>
<b>Baypure® DSP</b>	<p>can be considered as precursor for Baypure® DS100.</p> <p>In presence of water a slow formation of polyaspartic acid or Baypure® DS100 takes place; therefore Baypure® DSP is a slow-release-substance.</p> <p>The polyaspartic acid dissolves slowly limescale and prevents formation of new scale.</p> <p><b>Baypure® DSP tabs 200</b></p> <p><b>Baypure® DSP grinded</b></p> <p><b>Baypure® DSP</b></p>
<b>Baypure® DS100</b>	<p>is a new dispersing agent for use in a wide range of applications, for example to soften water in washing machines and dishwashers and to improve the dispersion of pigment particles in the production of paper, decorator's paints and other products.</p> <p>It has clear advantages over conventional dispersing agents in terms of performance and biodegradability.</p> <p><b>Baypure® DS100 / 40 %</b></p> <p><b>Baypure® DS100 solid</b></p>
<b>Baypure® CX100</b>	<p>is a medium-strength complexing agent with low remobilization of heavy metals.</p> <p>It is superior to conventional complexing agents because of its excellent ability to complex iron, copper and calcium ions and its very good biodegradability.</p> <p>Its main applications are in detergents and cleaning agents, the production of paper and textiles,</p>

	<p>the photographic industry and agriculture.</p> <p><b>Baypure® CX100 / 34 %</b></p> <p><b>Baypure® CX100 solid</b></p>
<p><b>Tetrasodium Iminodisuccinate</b> <b>Sodium polyaspartat solid</b></p>	<p>Tetrasodium Iminodisuccinate (INCI-Name of Baypure® CX100 )</p> <p>Sodium Polyaspartate (INCI-Name of Baypure® DS100)</p> <p>are suitable as complexing and dispersing agents for cosmetics.</p>
<p><b>BAYPURE® in Detergents and Cleaning Agents</b></p>	
<p><b>Laundry detergents</b></p>	<p>When Baypure®-products are used in detergents, dishwashing agents, products for cleaning windows and floors, and also car shampoo formulations, it increases the cleansing power of the products because it softens the water and enhances its soil-carrying capacity (also called anti-redeposition power).</p> <p>Detergents, washing agents and cleaners are complex formulations made up of surfactants, dispersing agents, complexing agents etc. etc.</p> <p>Surfactants, for example, only act effective when the water is soft, in other words, when the content of salts causing water hardness is low.</p> <p>Baypure® CX100 masks the troublesome metal ions, allowing the surfactants to act properly and prevent any sedimentation.</p> <p>Baypure® DS100 supports the softening effect of zeolites and, with its pronounced soil-dispersing property, reinforces the cleaning effect.</p> <p><b>Laundry detergents</b></p> <p><b>Dishwash</b></p> <p><b>Cleaner</b></p> <p>Detergent formulations can be divided into four main groups: Surfactants, builders with dispersing agent, bleaching agents and additives.</p> <p>For some years now, modern detergents have contained only biodegradable surfactants.</p> <p>On the builder side, we have developed a biodegradable dispersing agent under the name Baypure® DS 100, and a biodegradable complexing agent, Baypure® CX 100.</p> <p>This has made it possible to replace the main organic constituents of a detergent with biodegradable products.</p> <p>Oxygen-containing bleaching agents used for the washing of textiles can decompose by catalytic actions of traces of heavy metal ions, making them unable to fulfil their intended bleaching function.</p> <p>Baypure® CX100 specifically renders these metal ions harmless, and is suitable for stabilizing bleaching agents even in hard water.</p> <p><b>Low-phosphate detergents</b></p> <p><b>Phosphate-free detergents</b></p> <p><b>Phosphate-free percarbonate based detergents</b></p> <p><b>Liquid detergents</b></p>
<p><b>Dishwash</b></p>	<p>The aim of dishwashing agents is primarily to free crockery, glass and cutlery from remnants of food.</p> <p>At the end of the wash, after rinsing and drying, the various items in the dishwasher must be free of stains and streaks.</p> <p>Another requirement with machine washing is that the plates, cups, glasses etc. are not damaged in any way.</p> <p>Because of the differences in the cleaning conditions, a distinction is generally made between household machine cleaning and "industrial machine cleaning" (I&amp;I = Industrial and Institutional).</p>

**Household dishwashing**

**I&I dishwashing**

**Cleaner**

Whether in public buildings or at home, wherever we may be, we only feel comfortable if things around us are clean.

Eliminating dirt of all kinds is also essential for health reasons, e.g. in hospitals and medical surgeries.

Without the use of powerful detergents, our customary hygiene standards would be impossible to achieve.

To ensure that modern detergents have little or no effect on the environment despite their high level of efficiency, ecologically compatible components have been developed.

The readily biodegradable Baypure® CX100 is a complexing agent that protects surfactants and bleaching agents from the effect of metal ions.

Baypure® DS100 can increase the efficiency of a detergent through its water-softening, soil-carrying capacity.

For better recognition cleaners may be intensely colored.

The applied colorants may be sensitive to photooxidative degradation.

The use of the complexant would suppress the fading of the colorant.

**Household cleaning**

**Sanitary cleaning**

**I&I cleaning**

**Membrane cleaning**

**Carwash**

**Metal cleaning**

**Innovative Concepts for Water Treatment**

Water is life. A simple statement that is far more complex than it appears at first sight.

Not only did water play a key role in the creation of life on our planet, water is also of major significance for our eco system.

Regardless of how we use water in our modern world – as drinking water, for washing and cleaning, as cooling water, in industrial processes or in agriculture – it always returns to nature after use.

Water is in constant circulation in different states of aggregation.

This is why it is so important to handle this precious resource responsibly.

LANXESS has developed two more environmentally friendly alternatives to conventional, non-biodegradable dispersing agents and scale inhibitors:

Baypure® DS100 and Baypure® DSP. Because of their good biodegradability, Baypure® products do not have any known negative effect on waste water and thus have less impact on the environment.

**Dispersion Effect**

Since the complete removal of suspended solids is not a feasible approach, in large volume systems in particular, the dispersion thereof is of major concern in cooling and process water systems.

For the evaluation of the dispersants the kaolin dispersion test is widely accepted.

The following test results showing the outstanding effectiveness of polyaspartic acid, active of Baypure® DS 100.

The dispersion effectiveness applies to other inorganic systems also, which has been proven by a multitude of tests and the application of Baypure® DS 100 for the dispersion of inorganic pigments and the liquefaction of slurries.

In addition to the good dispersion properties of Baypure® DS 100 its threshold activity is of benefit in cooling and process water treatment applications.

**Cooling circuits**

**Waste Water**

The treatment of cooling water will provide industry and the environment with more and more problems in future.

The cost of water will increase and its availability will continue to decrease.

At the same time, ever stricter regulations will necessitate more measures to conserve the environment.

The biodegradable Baypure® DS100 is the ideal solution for such applications, and is making a pioneering contribution to environmentally friendly development.

In a test cooling circuit, it was able to stabilize water hardness levels of up to 1,000 mg calcium carbonate.

In addition, water treatment formulations based on Baypure® DS100 showed lower fouling rates and much lower corrosion rates.

All this reduces the amount of maintenance for the end-user and helps to keep servicing costs down.

**Stabilization of calcium carbonate**

**Stabilization of calcium sulfate**

**Calcium tolerance of Baypure® DS100**

**Stabilization of bariumsulfate**

**Degeneration of calcium carbonate**

**Degeneration of calcium phosphate**

**Corrosion protection**

**In-process analysis**

**Cooling circuits**

**Waste Water**

Wherever water ends up after use, it must be treated in an environmentally compatible manner.

In equipment for treating industrial effluent and in communal waste water treatment plants, deposits of carbonate or phosphate tend to form, and this can lead to costly downtimes or even breakdowns.

Baypure® products offer effective, more environmentally friendly solutions for such applications:

Baypure® DS100 can proactively prevent sediment from forming. In addition,

Baypure® DSP is able to break down existing deposits by forming free polyaspartic acid.

At the same time, it allows auto-dosage because of the slow dissolving process.

Baypure® CX100 can be used in certain cases for cleaning plant components in the waste water segment.

**Municipal sewage plant**

**Industrial sewage plant**

**Dispersing and Complexation in the Paper Manufacturing Industry**

In the paper industry, the question of environmental protection has become just as important as the aspect of cutting costs.

The biodegradable products of the Baypure® range are a good alternative to the raw materials conventionally used.

Baypure® CX100 is a useful replacement for the bleaching stabilizers used in the bleaching of pulp.

Baypure® DS100 is an effective dispersing agent in filler slurries and coating compositions.

<p><b>Bleaching processes</b></p>	<p><b>Bleaching processes</b></p> <p><b>Dispersing of fillers</b></p> <p><b>Scale-Inhibitor</b></p> <p>Fresh pulp or pulp obtained from waste paper is the main constituent of paper.</p> <p>In order to meet the today's requirements on paper in terms of its whiteness level, the pulp has to be bleached. Normally, hydrogen peroxide is used as the bleaching agent, and complexing agents are added to prevent its catalytic decomposition as a result of heavy metals dissolved in the process water.</p> <p>These products generally have poor biodegradabilities.</p> <p>Baypure® CX100 is an environmentally friendlier, more effective and economical alternative.</p> <p>Its active ingredient – iminodisuccinate – is readily biodegradable and has higher efficiency than EDTA and DTPA in water with a high calcium content.</p> <p>These advantages are of particular benefit in the recycling of water, which is becoming more and more important in the industrialized countries.</p> <p><b>Complexing constants</b></p> <p><b>H2O2 stabilization</b></p>
<p><b>Dispersing of fillers</b></p>	<p>Fillers are used in the paper industry to increase the whiteness and to thicken the pulp.</p> <p>They are used in the form of aqueous slurries, which, for economic reasons, are produced with the highest possible solids concentration.</p> <p>This can only be achieved by the addition of effective dispersing agents.</p> <p>Baypure® DS100 is highly effective in this respect and complies with the necessary requirements.</p> <p>It is also ecologically safe.</p> <p>An example involving the liquefaction of kaoline or lime slurries can be seen in the following diagram.</p> <p>Baypure® DS100 displays a dispersing effect comparable with the best dispersing agents in its class and, on top of this, it is biodegradable.</p> <p>Baypure® DS100is also suitable for the production of latex based coating compounds.</p>
<p><b>Scale-Inhibitor</b></p>	<p>A common problem in the wet end part of paper mills are incrustations mainly due to calcium carbonate or calcium oxalate, sometimes even calcium sulphite.</p> <p>Baypure® DS 100/40%, while having a good ecotoxicological profile, has proven effective in preventing and even reducing already formed scale.</p> <p>For calcium carbonate and calcium sulfate inhibition see water treatment.</p>
<p><b>Environmentally friendly Personal Care Products</b></p>	
<p><b>Cosmetics</b></p>	<p>All applications in the cosmetics industry make very high demands indeed on products used for skin and hair care.</p> <p>Whether we are talking about a gentle shower gel, a soothing body lotion for sensitive skin or a mild shampoo for clean and shining hair, they all come into contact with the skin and therefore require very sensitive and highly compatible ingredients – compatible not just with the human body, but also with the environment, which is where these constituents go after use.</p> <p>Tetrasodium Iminodisuccinate (INCI-Name of Baypure® CX100) is suitable as complexing agent for cosmetics (CTFA registration: Monograph Id 12122).</p> <p>Sodium Polyaaspartate (INCI-Name of Baypure® DS100) is suitable as dispersing agent for pigments (CTFA registration: Monograph Id 10093).</p>
<p><b>Body Care</b></p>	<p>Tetrasodium Iminodisuccinate can prevent the harmful effect of heavy metal traces in cosmetic products such as shampoos, creams (including sun-care products) and soap.</p>

Particularly colorants are catalytically degraded even by traces of heavy metals  
Tetrasodium Iminodisuccinate is able, even at a low dosage, to greatly enhance the shelf life of colorants.

Also peroxide containing formulations are stabilized successfully with the aid of our chelant and so perform better.

It masks heavy metals and, at the same time, enhances the effect of the surfactants.

**Shampoo**

**Bar soap**

**Inspired by Nature**

**Textile manufacturing**

Because the Baypure® products are so versatile and have such a broad range of convincing properties and environmental compatibility, other applications are opening up in addition to those already described in the other charts.

Their mechanisms of action can be easily transferred to other fields of use.

**Textile manufacturing**

**Industrial slurries**

**Oil field**

**Concentration of sugar syrups**

Current applications include bleaching of cotton used for the production of textiles or for the dyeing itself.

For cotton bleaching, use is nowadays made almost exclusively of hydrogen peroxide.

To prevent catalytic decomposition of the hydrogen peroxide due to traces of heavy metals dissolved in the process water, complexing agents are added.

In many cases, these are products like EDTA or aminomethylene phosphonates, which do not biodegrade very easily.

Baypure® CX100 is a more environmentally friendly and more effective alternative.

Particularly in water with a high calcium content, Baypure® CX100 is more effective than EDTA and aminomethylene phosphonates.

These advantages are becoming increasingly more important for the textile processing industry because in a growing number of countries throughout the world the industry has to comply with ever stricter regulations on the effluent load.

**Stabilization of H2O2 (Copper-II)**

**Stabilization of H2O2 (Iron-III)**

**Bleaching of Cotton**

**Industrial slurries**

Because of its excellent dispersing power compared with mineral solids, Baypure® DS100 is also suitable for use in the construction industry.

Applications here include the production of slurries of red and black iron oxide that are used, for example, in the production of roofing tiles.

Used here as a dispersing agent, Baypure® DS100 has proved to be just as good as conventional polyacrylates.

In wall paints, an additional increase in gloss (light reflection) was observed through better titanium dioxide pigment distribution.

It should also be possible to transfer this effect to other inorganic pigments.

**Oil field**

In the field of oil production, strict regulation changes which came into force in the North Sea area in 2005 have placed higher demand on the degradability of chemicals used on oil platforms.

Therefore Baypure® CX100 can be used not only as a substitute for conventional complexing agents in cleaners for platforms, but also as a scale inhibitor (the 'squeeze process') if the oil fields

are relatively close to the ocean floor (as in the Caribbean, for example).

Baypure® DSP, which is resistant to high temperatures, can be used in oil recovery processes as a scale inhibitor for sparingly soluble alkaline earth salts.

For this, use is made of the "\_slow-release process", previously mentioned during drainage descaling.

**Concentration of sugar syrups**

Baypure® DS100 is not just a good inhibitor of calcium carbonate incrustation, but can also be used to avoid deposits of other sparingly soluble salts.

Mention could be made here, for example, of calcium oxalate, which is formed during the clarification of thin sugar syrup.

During the thickening of sugar beet juice in raw sugar production, preventing the precipitation of sparingly soluble calcium salts is very important indeed.

The industry uses large quantities of organic polymers such as polyacrylates or copolymers which are more or less safe toxicologically but are not biodegradable.

Tests have showed that Baypure® DS100 is equally effective but has the big advantage of a very favorable overall ecotoxicological profile.