AGRANA STARCH

STARCHES FOR TEXTILE INDUSTRY

AGRANA STARCH



AGRANA AT A GLANCE

- Since 1988 we add value by processing agricultural raw materials.
- We operate in three different segments: SUGAR, STARCH, FRUIT.
- For more than 25 years we have believed in service, innovation and efficiency.

AGRANA IS ...

- the leading sugar producing company in Central and Southeastern Europe
- a specialist for customised starch products and a manufacturer of bioethanol and isoglucose
- the global market leader in producing fruit preparations for the dairy industry, and a leading supplier of fruit juice concentrates in Europe

AGRANA supplies local producers and large international companies, particularly in the food sector. The Starch segment also provides a large number of technical speciality products for a diverse range of sectors. AGRANA's strategy is to be an indispensable partner to its customers, based on ongoing product innovation, top quality and service on a global basis.

AGRANA´S UNDERSTANDING OF SUSTAINABILITY

AGRANA believes sustainability means acting in an economically, environmentally and socially responsible manner; whilst respecting its internal and external stakeholders.

In view of its commercial activities and the associated proximity to raw agricultural products, acting sustainably represents an integral part of AGRANA's business model. Relevant aspects of sustainability along our product added value chain start from the sourcing of the agricultural raw materials and intermediary products used, comprising energy and environmental aspects in our own production processes, employee working conditions, aspects of product responsibility and ethical business activities, as well as social commitment.

AGRANA processes around nine to ten million tons of agricultural raw materials per year. Particular emphasis is placed on sourcing from contract growers as, through close cooperation, they offer AGRANA the unique opportunity to work on improving social and environmental standards. Commitment to sustainability in its supply chain is the reason why the group joined the Sustainable Agriculture Initiative (SAI) in 2014. As an information platform, SAI aims to promote the development and implementation of sustainable agricultural practices.

ENERGY – AGRANA feels a particular obligation to conserving all natural resources; a focal area here is the unique and almost 100 % use of raw materials processed. We manufacture not only core products but also a wide range of animal feed material and fertilizer products. In autumn 2014, AGRANA committed itself to continuous improvement in energy use, through the launch of an energy management system and by certifying their Austrian production sites, in accordance with ISO 50001.

WATER – AGRANA aims to use water efficiently in the production system by using the water contained in the processed raw materials and thus limiting the amount of water withdrawn from other sources. Furthermore, AGRANA uses constant circulation with corresponding recycling. Waste water is discharged in accordance with all local legal requirements after being treated in AGRANA's own or external waste water treatment plants.

FOOD – Given that AGRANA primarily makes intermediary products for the food processing industry, food safety and production protection form a key element of our product responsibility. We ensure that we adhere to the internationally recognized standards for food safety and product protection, including FSSC 22000, ISO 22000 and IFS.

SOCIAL – In addition to its environmental approach, AGRANA also pays attention to social aspects in its production. Since 2009, AGRANA has been a member of the Supplier Ethical Exchange Database (SEDEX), an organisation of companies which are committed to strive for continuous improvement in their social-ethical behaviour and which promote this along their supply chains.



SIZING AGENTS FOR YARNS

STARCH is the product most widely used for sizing of staple fiber yarns made of wool, rayon, linen and for mixtures of these fibers with manmade fibers. AGRANA starch products are biologically degradable special starches which, using ultrafiltration plants, can be recovered even when used in combination with synthetic sizing agents.

HOT WATER SOLUBLE

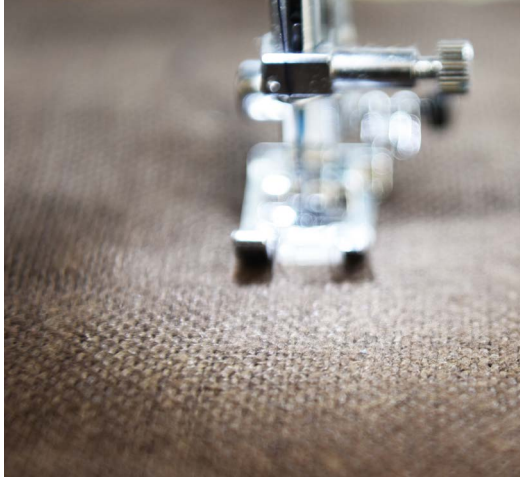
ARTICLE	SOLAMYL®9570	SOLAMYL®9636
RAW-MATERIAL	potato starch	potato starch
CHEMICAL MODIFICATION	starchether	starchether
APPEARANCE	white powder	white powder
VISCOSITY	low	high
SIZING AGENT FOR		
COTTON	x	x
LINEN	x	x
RAYON	x	x
WOOL	x	x
BLENDS WITH MANMADE FIBERS	x	x
DE-SIZING	alkaline washing	enzymatic

COLD WATER SOLUBLE

ARTICLE	AMITROLIT® 8160	AMITROLIT® 8165
RAW-MATERIAL	potato starch	potato starch
CHEMICAL MODIFICATION	starchether	starchether
APPEARANCE	white flakes	white flakes
VISCOSITY	middle	low
SIZING AGENT FOR		
COTTON	x	x
LINEN	x	x
RAYON	x	x
WOOL	x	x
BLENDS WITH MANMADE FIBERS	x	x
DE-SIZING	slightly alkaline washing	

COLD WATER SOLUBLE

ARTICLE	AMITROLIT® 8900	AMITROLIT® 8923
RAW-MATERIAL	potato starch	potato starch
CHEMICAL MODIFICATION	starch	phosphate-ester
APPEARANCE	cream coloured granules	cream coloured granules
VISCOSITY	middle	middle
SIZING AGENT FOR		
COTTON	x	x
LINEN	x	x
RAYON	x	x
WOOL	x	x
GLASS FIBRE	x	
BLENDS WITH MANMADE FIBERS	x	x
DE-SIZING	slightly alcaline or enzymatic washing	



TEXTILE PRINTING AND BELT-ADHESIVES

AGRANA STARCH products can be used as thickener for dye pastes and also to increase the brilliance and ensure sharper contours. AGRANA starch products for fabrics and knitwear made of cotton, viscose, manmade and mixed weaves.

ARTICLE	AMITROLIT® 8844	AMITROLIT® 8855	AMITROLIT® 8839	AMITROLIT® 8160
RAW-MATERIAL	corn starch	corn starch	corn starch	potato starch
CHEMICAL MODIFICATION	starchether	starchether	starchether	starchether
APPEARANCE	fine powder	flakes	slightly beige, coarse powder	white flakes
THICKENER FOR	vat dyestuff all-in and two phase process, disperse, rapidogen, reactive dyestuffs	vat dyestuff all-in and two phase process, disperse, rapidogen, reactive dyestuffs	reactive dyes in combination with alginates	adhesive for textiles during the printing
	alkaline discharge/ resist on polyester	alkaline discharge/ resist on polyester		
	transfer printing	transfer printing		

DIGITAL GARMENT PRINTING

DIGITAL INKJET PRINTING is having a major impact on the processes of textile printing and is on the way to transform this industry. It allows for single pieces, medium-quantity as well as, thanks to the steep technological development curve even long-run alternatives to screen printed fabric.

In conventional analog screen printing modified starch ethers are used directly in the printing paste to obtain contour sharpness together with color brilliance.

DIGITAL INKJET PRINTING has transferred these requirements towards the obligatory preparation of the substrate. The pre-treatment of the garment has a significant impact on the printing result. AGRANA offers special modified starches as antimigrant to prevent bleeding to be used in the preparation of textile substrates as alternative to alginates.

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