

ROHAPECT®

Enzymes for Fruit Processing

In 1934 we introduced the first pectinase enzyme, marketed today as ROHAPECT®. This innovation revolutionized the fruit juice industry and our enzymes continue to be the most effective products on the market today.

www.abenzymes.com



Apples and Pears

Our apple mash enzyme, **ROHAPECT® MA Plus** – the first of its kind on the market – uses special pectinases to loosen the rigid cell structure of apples, thus increasing juice yield and capacity while reducing clarification and filtration bottlenecks. **ROHAPECT® MA Plus** degrades only soluble pectin and protects insoluble pectin so that the pomace remaining after juice extraction can be reprocessed to extract pectin for the food industry.

ROHAPECT® PTE 100 is a mash enzyme used for soft-structure and low-acidity apples, and particularly for pears.

Choosing the right mash enzyme is essential for improving the subsequent steps in juice treatment.

Depectinization is carried out with pectinases and arabinanases, resulting in the most rapid pectin hydrolysis possible, enabling the juice clarification and filtration steps to proceed smoothly.

ROHAPECT® UF is a powerful “2 in 1” product used for depectinization and cross-flow membrane filtration. Ultrafiltration flux and throughput are increased, membrane fouling is reduced, and overall filter lifetime is extended.

Starch degradation is required to prevent haze formation after processing and during storage. **ROHALASE® AFL** is the right enzyme for complete starch breakdown, producing clear and stable fruit juices or concentrates.

Cold mashing / Hot mashing / decanter technology / Pomace extraction / Clarification / Ultrafiltration / Starch degradation / Protein stabilization / Cloudy juice / NFC

PRODUCTS	MASH TREATMENT				JUICE TREATMENT				
	Cold mashing	Hot mashing / decanter technology	Pomace extraction	Clarification	Ultrafiltration	Starch degradation	Protein stabilization	Cloudy juice / NFC	
ROHAPECT® MA Plus	●		●						
ROHAPECT® PTE 100 (PF)	●							●	
ROHAPECT® DA Plus				●					
ROHAPECT® MC	●			●					
ROHAPECT® MA Decanter		●	●	●					
ROHAPECT® VR-L							●		
ROHAPECT® UF					●				
ROHAMENT® CL			●						
ROHALASE® AFL						●			
GAMMADEX CAL						●			

Berries

Berry fruits such as black currants and cranberries are generally characterized by thick skins and high levels of soluble pectin, hemicellulose, polyphenols, and acidity in the fruit (see table below).

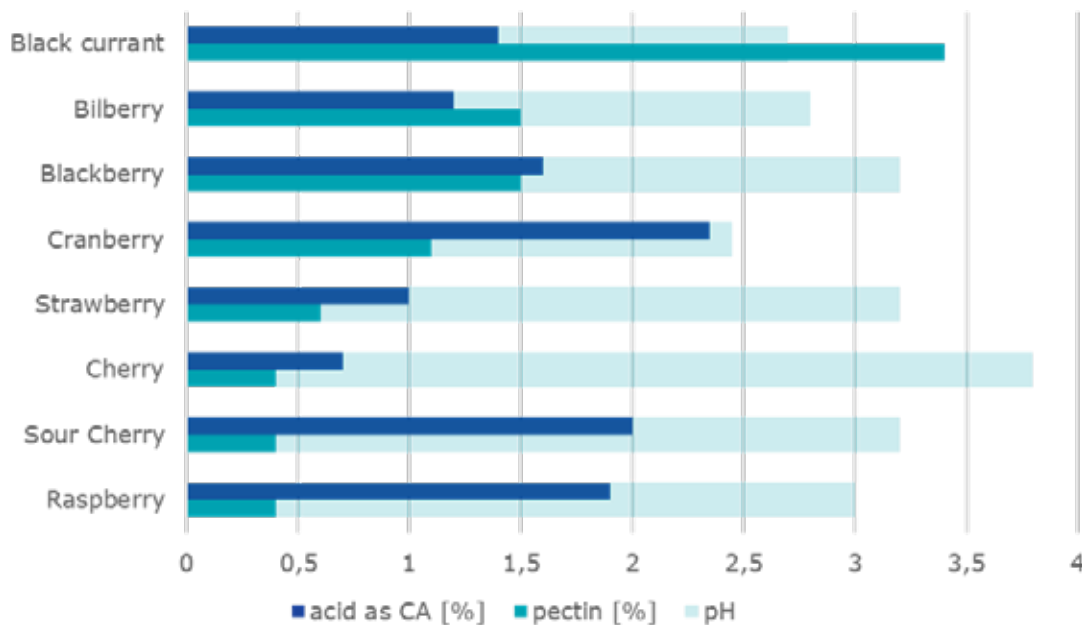
It is very important to select the right enzyme for mash treatment, which is a crucial step that rapidly reduces mash viscosity and produces high juice yields as well as color extraction and conservation. The mash treatment determines the composition of the juice and its subsequent processability, including ultrafiltration. The ensuing juice treatment ensures total pectin degradation and proper juice clarification.

ROHAPECT® MC is the preferred berry-processing enzyme. It is usually applied in two steps: mash treatment and juice treatment.

ROHAPECT® MC can be applied to a variety of berries. Its dosage depends on the berry fruit's composition, for example, pectin content and acidity.

Discuss your specific needs for berry processing with our experts.

Acid concentration, pectin and pH of different berries



Other Fruits

Our tailor-made formulated enzyme preparations are widely used in fruit and vegetable processing for a variety of reasons. They can increase yield, shorten processing time and improve product quality. In addition, enzymes may contribute to reducing waste and production costs.

Industrial processes are very diverse and numerous. Discuss your application needs with our fruit enzyme experts.

AB Enzymes offers a broad product range for processing grapes, peaches, pineapples, bananas or any other fruits.

- Color extraction
- Juice depectinization
- Peach and apricot puree
- Peach and apricot clear juice
- Cherries
- Olives
- Pineapple juice
- Clear banana juice
- Vegetable juice / puree
- Membrane cleaning
- Fruit firming

PRODUCTS	GRAPES		STONEFRUITS			TROPICAL		OTHERS			
	1	2	3	4	5	6	7	8	9	10	
ROHAPECT® PTE 100 (PF)			●						●		
ROHAPECT® DA6L		●		●							
ROHAPECT® MC	●	●		●				●	●		
ROHAPECT® MPE 2.0											●
ROHAPECT® MA Decanter						●					
ROHAPECT® VR-L					●			●			
ROHAPECT® UF					●						
ROHAPECT® BIL							●				
ROHALASE® BXL										●	
ROHAMENT® CL									●	●	
ROHALASE® AFL								●			
GAMMADEX CAL								●			

Citrus Fruits

There are significant differences in processing citrus fruits as compared to most other fruits. Citrus juice extraction aims to obtain the best possible separation of juice, peel, and essential oil. Through the use of tailor-made, formulated enzyme preparations, various types of products can be produced, thereby optimizing processes.

ROHAPECT® PTE 100 (PF) is an endo-pectin lyase that provides superior performance for the most important citrus applications like cloudy juice concentration, pulp wash, or peel extraction.

ROHAPECT® PTE 100 (PF) helps rapidly reduce viscosity without affecting the characteristics and stability of the cloudy substrate. This avoids jellification and improves concentration.

Membrane processes are also of great importance in this industry. The treatment with **ROHAPECT® VR-L** before membrane filtration effectively increases permeate flow and reduces membrane fouling.

ROHAPECT® DA6LT is the best choice for essential oil recovery. The combination of activities improves oil-liquor separation and the purity of the recovered oils. In addition, it supports oil winterization.

Cloudy juice concentrate
Pulp wash / core wash
Cloudy peel concentrate
Clear juice
Essential oil recovery
Ultrafiltration

	CITRUS					
PRODUCTS	Cloudy juice concentrate	Pulp wash / core wash	Cloudy peel concentrate	Clear juice	Essential oil recovery	Ultrafiltration
ROHAPECT® PTE 100 (PF)	●	●	●			
ROHAPECT® LPHT				●		
ROHAPECT® DA6LT					●	
ROHAPECT® MC				●		
ROHAPECT® VR-L						●
ROHAMENT® CL			●			



Reasons to Choose AB Enzymes

- We have a passion for meeting our customers' challenges and strive to achieve perfect solutions.
- We address your challenges with know-how and a focused mind.
- Our strategy and the work of our experts are solid, realistic, and based on years of experience.
- We are dedicated to creating value for your business.

Contact our technical experts to find the right solution for your desired product.

Contact us:

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