

Gain the right enzyme for your fruit application

DSM's range of sustainable fruit & vegetable processing enzymes

Whether you are producing regular or organic juice, fruit puree or indulgent snacks, the DSM Rapidase® range of enzymes enables you to get the most out of your fruit and vegetable applications.

info.food@dsm.com

NUTRITION · HEALTH · SUSTAINABLE LIVING



DSM

BRIGHT SCIENCE. BRIGHTER LIVING.

The right enzyme for your fruit application

Choose Rapidase® for your fruit and vegetable processing and you choose the most established and versatile enzyme brand in the industry. Our Rapidase® range enables higher yields, faster clarification, improved texture, firmness and color.



Apple and Pear Juice Processing

The challenge for juice processors is to achieve consistently high yields and robust processing, despite the varying quality of raw materials and ensure maximum throughput during peak season. DSM's Rapidase® range of fruit processing enzymes addresses these challenges, delivering a consistent, high quality, crystal clear apple juice.



Tropical Fruit Processing: Citrus, Pineapple, Stone Fruits (Mango, Papaya, Guava & Peach)

Loaded with vitamins and a great source of antioxidants, tropical fruits have been an integral part of juice and puree processing especially in recent years. DSM's special designed tropical fruit enzymes, such as Rapidase® Pineapple and Rapidase® PL Classic for Pineapple and Citrus processing, and Rapidase® Fiber for stone fruits processing are here to ensure smooth operation, maximize yield and plant capacity, and facilitates new product developments.



Red Fruits Juice Processing

The juice of colored fruits like blackcurrants, sour cherries, cranberries and pomegranates is appreciated by consumers for its vibrant color and health benefits linked to high antioxidant and anthocyanin content. For this reason, the juice consumption of these super fruits is growing at a fast pace. DSM's Klerzyme® and Rapidase® Smart Color have been specially developed for efficient processing of berry juices and do not contain side-activities that break down anthocyanin, ensuring the release of all the fruit's vibrant color and antioxidants.



Fruit Firming

Consumers prefer food with an authentic look, taste and texture, in which individual ingredients can be clearly recognized and no artificial ingredients are used. Fruit and vegetable pieces convey the sensation of authenticity and indulgence in new food products like beverages, yogurt and baked goods. DSM's Rapidase® PEP enzymes and Rapidase® FP Super enzymes ensure that these fruit and vegetable pieces are kept firm and appealing, even after mechanical and thermal treatment, improving the overall sensory experience of the product.

Fruit Enzymes Application Reference Table

Fruit type	Application	Rapidase® Press	Rapidase® Press KPO	Rapidase® Smart Plus	Rapidase® Smart	Rapidase® Power	Klerzyme® 150	Klerzyme® 201	Klerzyme® 202	Rapidase® Smart Color	Rapidase® C80 Max	Rapidase® C80 KPO	Rapidase® Smart Clear	Hazyme® DCL	Rapidase® Fiber	Rapidase® PEP	Rapidase® FP Super	Rapidase® Pineapple	Rapidase® PL Classic	Rapidase® Sensation	Validase® TRL	
Apple / Pear	Juice extraction - Horizontal / belt press	●	●	●	●					●												
	Juice extraction - Decanter	●	●	●	●	●				●												
	Juice extraction - Cloudy juice															●	●					
	Juice extraction - Pomace pectin recovery															●	●					
	Juice clarification - Depectinization					●					●	●	●									
	Juice clarification - Starch degradation													●								
	Juice ultrafiltration - Flux improvement					●																
	Ultrafiltration filter cleaning														●							○
Colored / Red fruit	Juice / color extraction					●				●												
	Juice clarification - Depectinization					●				●												
	Ultrafiltration filter cleaning													●								○
	Concord grape processing					●	●	○	○	●												
	Strawberry / Raspberry juice extraction	●								●												
Citrus fruit	Aroma natural cloudifier extraction																			●		
	Juice concentration - Avoid jellification									●											●	
	Pulp washing - Second juice recovery									●											●	
	Juice clarification - Depectinization					●				●												
	Essential oil recovery									●	●	●									●	

● enzyme used in application ○ when used in combination, enhance performance

Fruit Enzymes

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Pineapple	Mill juice extraction																						
	Mill juice clarification																						
	Ultrafiltration filter cleaning																						
Other fruits	Stone fruit puree processing																						
	Stone fruit clear juice extraction																						
	Pomegranate juice processing																						
Vegetable & Others	Vegetable juice extraction																						
	Olive oil extraction																						
	Tomato puree firming																						
	Tomato seed cleaning																						
Indulgence enhancement	Fruit firming																						
	Puree consistency																						
	Flavor enhancement																						
	Plant extracts																						

● enzyme used in application ○ when used in combination, enhance performance

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