







## **IMCD Performance Products**

IMCD has been a valued supporter of the Australian beverage industry for over 40 years. We are actively involved in the distilled spirits and brewing industries and are members of the ADA (Australian Distillers Association) and IBD (Institute of Brewing and Distilling). We also support the IBA (Independent Brewers Association).

This portfolio showcases our broad range of exclusive products from our valued suppliers. With the support of our expert sales team, customers Australia wide can choose products that best suit their applications whether it be beer, cider or spirits.

IMCD: Creating a World of Opportunity.

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# **Brewing**

BACTERI	A - SOUR BEER	
4928569	HARVEST LB-1 EACH	Lactobacillus Plantarum, rapid & reliable bacteria, for sour beers. 1 pouch for 1,000 litres
BACTERI	A NUTRIENT - BEER	
4929417	BACTIV AID 2.0 PACK	Nutrient for bacteria. 1 pack for 2,500 litres
ENZYME	S - BEER	
4929381	ROHALASE BARLEY L 25KG CAN	β Glucanase, Liquid
4929416	ROHAMENT CL 25KG CANISTER	Cellulase with $\beta$ Glucan $\&$ Xylan activity, Liquid
4929415	ROHAMENT CEP 10KG BAG	Cellulase with $\beta$ Glucan $\&$ Xylan activity, Powder
YEAST - (	CIDER	
4929432	VINIFLORA JAZZ 0.5KG PACK	Fruity Esters
4929433	VINIFLORA MELODY 0.5KG PACK	Tropical fruit & roundness
4929434	VINIFLORA MERIT 0.5KG PACK	Neutral with less astringency
SALTS, A	CIDS, pH ADJUSTMENT	
4914655	CALCIUM SULPHATE FCC - ACG 11.34KG BAG	
4922893	OMYABAKE 50 KP 25KG BAG	Calcium Carbonate
4916126	CALCIUM CHLORIDE 77% FOOD 25KG BAG	
4914572	MAGNESIUM SULPHATE USP 22.7KG BAG	
4929302	LACTIC ACID 88% 25KG DRUM	Lactic Acid
4922721	SODIUM BICARBONATE 25KG	pH Balancer
4930749	CITRIC ACID ANHYDROUS 15KG	pH Adjustant
4930780	DAP FOOD GRADE 8KG	Nitrogen source for yeast
FININGS	AND STABILISERS	
4915788	PVPP-F (E-1202) 20KG DRUM	Reduces protein and chill haze, removes polyphenols
4928953	GELBRITE 10KG BAG	Blend of Carrageenan and PVPP
4928769	MCPI GELFLOC 40 25KG BAG	Carrageenan kettle finings
4911952 4928405	STABISOL 300 70KG DRUM STABISOL 300 24KG PAIL	Vegan and Vegetarian friendly silica hydrogel based finings
4914010	SILFAX D20 (FG) 25KG PAIL	Antifoam
4930734	MAGRABAR 4000 18KG	Organic antifoam
4929083 4929254	XGEL P 7030 500KG BULK-BAG XGEL P 7030 10KG BAG	XGEL (Stabiquick Strong ) + PVPP



















# **Brewing**

FILTRATIO	ON	
4850811	STABIQUICK SELECT 20KG BAG	A Hydrated Xerogel, reduces dust, absorbs haze forming protein compounds improving stability, shelf life & sharpens the filtration process
4913053	STABIQUICK STRONG 20KG BAG	A Xerogel, absorbs haze forming protein compounds improving stability, shelf life & sharpens the filtration process
4914146	HAHNFLOCK H 40 17.5KG BAG	Cellulose Precoat
4915502	PERLITE 4152C (815C) 20KG BAG	Precoat
4915521	PERLITE 472 (87) 20KG BAG	Body Feed
4915515	PERLITE 422 (82) 20KG BAG	Fine Body Feed
4916399	PERLITE 81SF (412SF) 15KG BAG	Superfine
FILTER SI	HEET GRADES	
Z3 - Z4 - Z5	Clarifying filtration	
Z5 - Z6	Polished filtration	
Z6 - Z7	Final filtration	Combined with pasteurisation
Z7 - Z8	Final filtration	Combined with hot bottling
Z7 - Z8 - Z9 - Z10 - Z11	Final filtration	Combined with preservatives
Z8 - Z9 - Z10 - Z11	Final filtration	Cold sterile bottling
COOLING	ì	
4925571	PROPYLENE GLYCOL USP/EP 215KG DRUM	Industrial Coolant
4910462	DOWFROST (HEAT TRANSFER FLUID) 220KG DRUM	Food grade Coolant
RAW ING	REDIENTS	
4920239	DEXTROSE MONOHYDRATE BP GRADE 25KG BAG	Increases alcohol content of final beer
CARBON		
4910140	NORIT CASP-FOOD 15KG BAG	Purification of highly coloured/high foaming liquid
4900500	NORIT SX ULTRA 15KG BAG	Superior absorption capacity
4913538 4915659	NORIT RB3-W 25KG BAG NORIT RB4-W 25KG BAG	CO <sup>2</sup> Purification















# Givaudan

Givaudan has the flavours you need to create innovative beverage products that delight the consumer

## **TasteSolutions**® Alcohol Modifier Flavours

Key taste and sensory attributes associated with alcohol beverage experience



# Alcohol Perception and Boosting

Modification combined with boosting of the alcoholic taste with enhancement of body and mouthfeel

### **Ageing**

Modification that delivers the perception of key attributes associated with barrel ages spirits

#### **Smoothening**

Modification combined with smoothening of the alcoholic taste offering a premium experience.

#### Sensation

Modification combined with sparkling booster for micro bubble perception and tingling effect

#### **Sweetness**

Modification of alcohol combined with an increase in the sweetness perception, also enabling sugar reduction

Please discuss your requirements with our IMCD representatives

## **Ask us About Alcohol School!**

## **Distilling**

ENZYMES	S	
4928709 4928708	DISTILAZYME GA 1KG PACK DISTILAZYME GA 20KG PACK	Glucoamylase
4928706 4928707	DISTILAZYME AA 1KG PACK DISTILAZYME AA 20KG PACK	Alpha Amylase
4930671	DISTILAZYME BG 1KG PACK	Beta-Glucanase

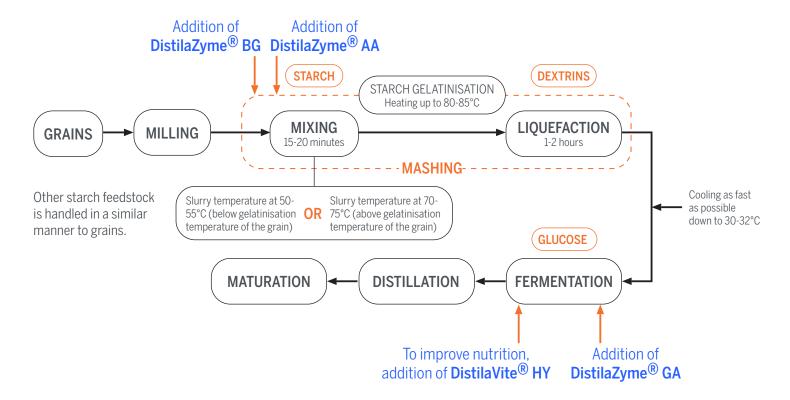


## Why do we Need Enzymes in Grain Spirits Production?

- · To break non-starch viscosity down
- To break starch down to fermentable sugars
- · To break peptides down to amino acids

All the cereals (corn, rye, barley, rice, etc.) and some roots, i.e. potatoes, contain starch which are glucose polymers. Starch cannot be fermented by yeast directly and must be broken down to simple sugars: glucose, maltose.

#### **Diagram of Grain Spirits Production**



The optimal DistilaZyme® AA, DistilaZyme® BG and DistilaZyme® GA dosages are variable according to individual distillery production processes.

## **How do Enzymes Work?**

**Enzymes** are highly specific: one enzyme catalyses one biochemical reaction: one key for one lock!

- Beta-glucanase (BG) reduces non-starch viscosity
- Alpha-amylase (AA) breaks down starch into dextrins
- Glucoamylase (GA) breaks down dextrins into glucose
- · Protease breaks down proteins into amino acids

The activity of the enzymes depends mainly on the pH, the temperature and the dosage.

## DISTILAZYME® BG DISTILAZYME® AA

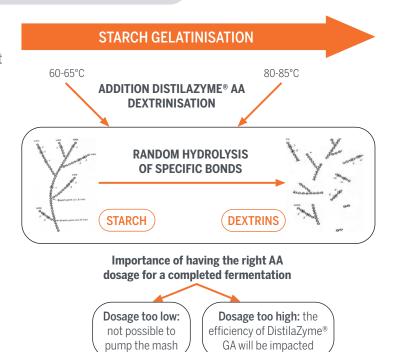
Goal: Reduce viscosity to pump the mash and to provide a substrate for DistilaZyme® GA action.

#### How does it work?

**DistilaZyme**<sup>®</sup> **BG** is a liquid β-glucanase enzyme complex that quickly hydrolyses non-starch polysaccharides (NSPs) such as  $\beta$ -glucans and xylans reducing viscosity in mashes that contain high proportions of rye, wheat or other small grains. It works well in combination with DistilaZyme® AA.

#### DistilaZyme® AA.

After mixing, the temperature is increased progressively. During heating, the granules swell irreversibly and the granular structure collapses: Gelatinisation. For each type of grain there is a typical gelatinisation temperature range. This changes according to variety, region, year, etc. We increase the temperature for DistilaZyme® AA activity and for the liquefaction (dextrinisation) to occur.



## DISTILAZYME® GA

Goal: To convert dextrins resulting from DistilaZyme® AA action into fermentable sugars: Saccharification.

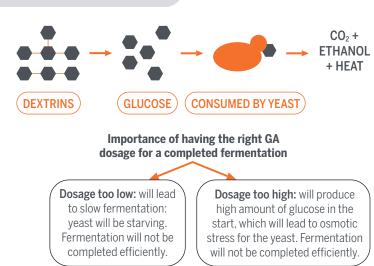
#### How does it work?

Glucoamylase breaks Alpha-bonds to convert dextrins (oligosaccharides) into glucose units.

#### When to add DistilaZyme® GA

Simultaneous Saccharification and Fermentation (SSF): after liquefaction, the mash is cooled to fermentation temperature and DistilaZyme® GA is added 1-2 hours after the yeast directly in fermenter. It allows control of contamination and osmotic stress due to the controlled sugar release therefore a good start of fermentation.

We do not recommend to use DistilaZyme® GA before the fermentation vessel because it can cause significant issues with contamination and osmotic stress.

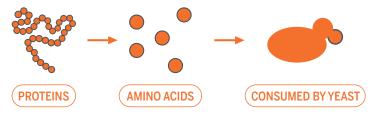


# **DISTILAVITE® HY**

**Goal:** To provide a gradual and optimised release of natural amino acids during the fermentation.

#### How does it work?

Yeast is a complex living organism which needs a balanced nutrient package. Thanks to its specific selected proteolytic enzymes, DistilaVite® HY allows the release of essential amino acids throughout the entire fermentation process.



They have the right protease dosage for a completed fermentation:

DistilaVite HY is added to the fermenter at the start of filling.

## **Distilling**

YEASTS		
4921600 4921601	DISTILAMAX RM 0.5KG PACK DISTILAMAX RM 10KG PACK	Rum, Molasses, Cane juice
4921598 4921599	DISTILAMAX SR 0.5KG PACK DISTILAMAX SR 10KG PACK	Rum, Molasses, Cane juice
4928454	DISTILAMAX CN 0.5KG PACK	Rum, Molasses, Cane juice
4921596 4921597	DISTILAMAX LS 0.5KG PACK DISTILAMAX LS 10KG PACK	Light Neutral Spirit, Fruit
4921590 4921591	DISTILAMAX HT 0.5KG PACK DISTILAMAX HT 10KG PACK	High temp tolerant yeast
4926676	DISTILAMAX TQ 0.5KG PACK	Tequila, Fructophillic yeast
4921592 4921593	DISTILAMAX MW 0.5KG PACK DISTILAMAX MW 10KG PACK	Malt Whisky
4921594 4921595	DISTILAMAX GW 0.5KG PACK DISTILAMAX GW 10KG PACK	Grain Whisky
4925610 4930064	DISTILAMAX XP 0.5KG PACK DISTILAMAX XP 10KG PACK	Malt Whisky, elevated temperature producing complex congeners, higher ester production. This is a Diastatic yeast
4925611 TBA	DISTILAMAX NT 0.5KG PACK DISTILAMAX NT 10KG PACK	Grain & Malt Whisky, desirable congener profile, increased complexity and fruit characters
YEASTS	NUTRIENTS	
4921602	DISTILAVITE GN 0.5KG PACK	Complex nutrient for sugar & grain ferments
4921604	DISTILAVITE VM 0.5KG PACK	Nutrient with enzyme for grain ferments
4928990	DISTILAVITE HY 0.5KG PACK	Nutrient for grain ferment with protease
BACTERI	A	
4929627	DISTILABACT LP	Lactobacillus bacteria for whisky







# **Characteristics of DistilaMax®**

TEMPERATURE	RAW MATERIAL	DISTILAMAX®	PH RANGE	ETHANOL CONTENT	HIGHER ALCOHOLS	ESTERS	ADDITIONAL INFORMATION
20°C - 28°C		MW	3.8 - 5.3	••	<b>*</b>	***	
		NT	3.8 - 5.3	***		••	
		XP	3.8 - 5.3		***	***	
28° - 34°C		MW	3.8 - 5.3	***			
	Malted Barley	NT	3.8 - 5.3	***			
	2009	XP	3.8 - 5.3		***	***	
34°C - 36°C		MW	3.8 - 5.3	<b>▲</b> & & & \	<b>♦</b> 000	•000	
		NT	3.8 - 5.3	<b>♦</b> 886	<b>♦</b> 000		
		XP	3.8 - 5.3	***	••	••	
20°C - 34°C		GW	3.8 - 5.3		***	•000	Used for Whisky
20°C - 36°C		NT	3.8 - 5.3	***	***	••	
25°C - 33°C	Grain	MW	3.8 - 5.3	***	***	•000	Recommend with rye due to foam
31°C - 35°C		HT	3.8 - 5.2		•000	•000	Used for neutral spirit
<28°C - 31°C		DS	3.8 - 5.2	***	•◊◊◊	<b>♦</b> 888	production
25°C - 38°C	CANE Molasses	CN	3.4 - 5.3		•••	***	Selected on cane juice, works well at high temperature
25°C - 36°C		SR	3.6 - 5.3		***	••	Selected on molasses
25°C - 34°C	BEET Molasses	SR	3.6 - 5.3	***	***	***	Selected on molasses
27°C - 33°C		RM	3.3 - 5.3	••	***	***	Selected on cane juice,
33°C - 36°C		RM		•••	***	***	works well at high temperature
27°C - 33°C	SUGAR	CN	3.4 - 5.3	***	**	•••	Selected on cane juice,
33°C - 38°C	CANE Juice	CN		***	***	***	works well at high temperature
27°C - 33°C		SR	3.6 - 5.3		***	***	Good results on ethanol content
20 °C - 33°C		TQ	3.2 - 5.2		***	***	
20 °C - 33°C	Agave	LS	3.2 - 5.2		***	1100	
20 °C - 33°C	Fruit	LS	3.2 - 5.2		***	***	Works well at low pH
20 °C - 33°C		TQ	3.2 - 5.2			1100	







# **Distilling**

## **CARBON**

4922862

4913168 NORIT GAC 1240 W 25KG BAG 4913544 NORIT GAC 830 W 25KG BAG

NORIT PK 1-3 10KG BAG

Multipurpose for removal of taste & odour





#### **CARAMELS AND COLOURS**

Product Name	Description	Hue Index (Typical)	Stability in Alcohol (ABV)
CARAMEL 050	Class IV, double strength	4.2	50%
CARAMEL 108	Class IV, single strength	5.8	60%
CARAMEL 136	Class IV, single strength	5.4	75%
CARAMEL 520	Class I, acid proof	6.5	60%
CARAMEL 570	Class I	7.0	80%
BURNT SUGAR 720	Burnt Sugar, acid proof	6.5	60%
BURNT SUGAR 785	Burnt Sugar	6.5	75%
NaturBrown 805	Natural Caramelised Pear Juice	6.8	60%
NaturBrown 811	Natural Caramelised Apple Juice	6.8	60%
CARAMEL 820	Certified Organic Caramel Colour, acid proof	6.5	60%
CARAMEL 830	Natural Flavouring; Caramelised Sugar	6.0	35%

CU TED	CHEET	ODADEC
FILIER	SHEET	GRADES

FILTER SHEET GRADES		
Z4 - Z5	Prefiltration	Whisky, Brandy
Z3 - Z4	Prefiltration	Dark Rum , Bourbon
Z6 - Z7 - Z8	Final filtration during bottling	Whisky, Brandy
Z5 - Z6 - Z7	Final filtration during bottling	Dark Rum , Bourbon
Z6 - Z7	Final filtration during bottling	White Spirits
Z3 - Z4 - Z5	Final filtration during bottling	Liqueurs



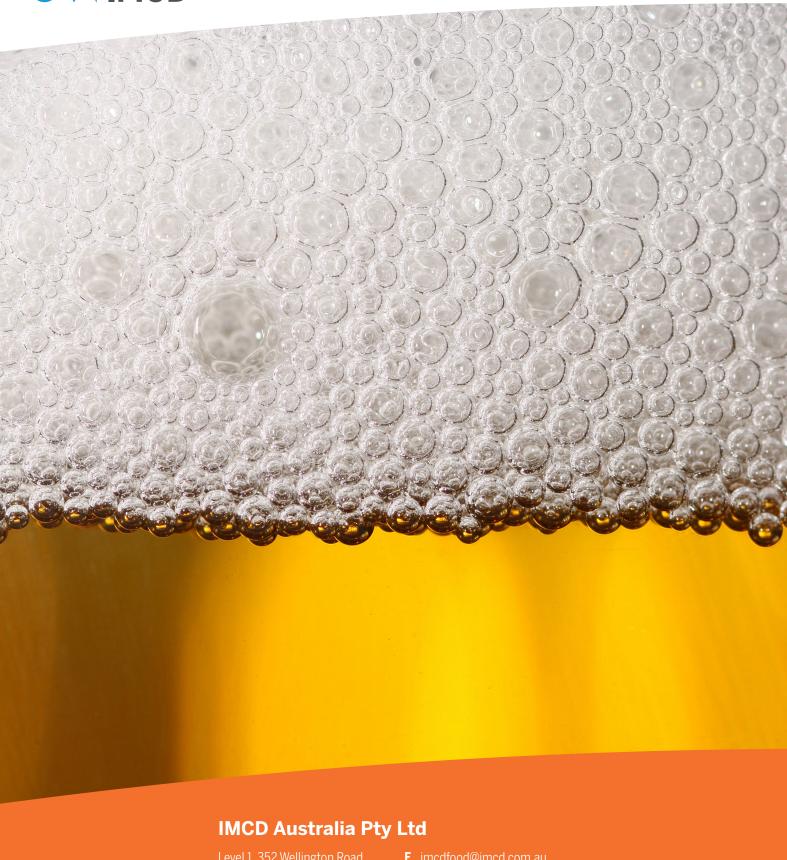


# **Our Team**

<b>Darren Burt</b> General Manager - Performance Products	+61 (0) 425 717 344	Darren.Burt@imcd.com.au
<b>Sue Mills</b> Business Manager	+61 (0) 427 370 008	Sue.Mills@imcd.com.au
<b>Customer Service</b> National	1300 655 328	imcdfood@imcd.com.au
<b>Amy Han</b> Telesales - VIC	+61 (0) 3 8544 3193	Amy.Han@imcd.com.au
<b>Ryan Cullen</b> Telesales - VIC/TAS	+61 (0) 435 004 244	Ryan.Cullen@imcd.com.au
<b>Indika Weerasinghe</b> Account Manager - SA	+61 (0) 427 370 011	Indika.Weerasinghe@imcd.com.au
<b>Patrick Wesley</b> Account Manager - NSW	+61 (0) 425 220 157	Patrick.Wesley@imcd.com.au
<b>Bev Romero</b> Account Manager - WA	+61 (0) 425 724 084	Bev.Romero@imcd.com.au
<b>Nathan Schultz</b> Account Manager - QLD	+61 (0) 427 011 256	Nathan.Schultz@imcd.com.au







Level 1, 352 Wellington Road, Mulgrave, VIC, 3170 Australia

**E** imcdfood@imcd.com.au **T** 1300 655 328

