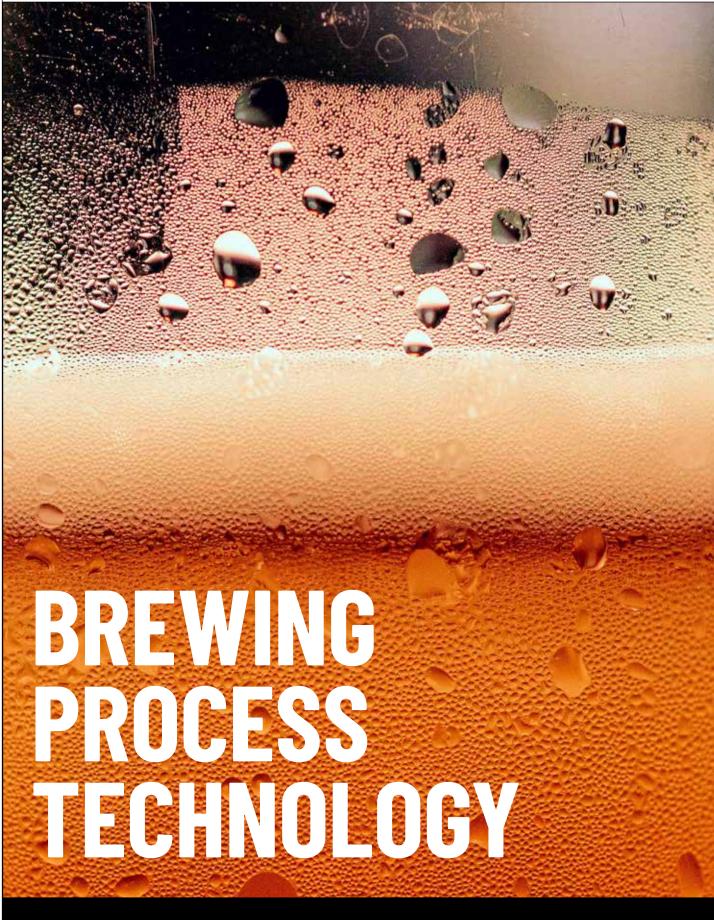


ENHANCING THE TASTE



WWW.AEB-GROUP.COM

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BIOTECHNOLOGY

A COMPLETE RENGE OF STABILIZERS, CLARIFIERS, ENZYMES, SPECIFIC TREATMENTS, YEASTS, NUTRIENTS AND TANNINS FROM THE BREWHOUSE 'TILL THE FINAL PACKAGING.

AEB | BREWING

BIOTECHNOLOGY

Please note: the dosage recommendation may vary depending on the processing conditions selected by the brewer. The format is varied depending on the country of origin. For exact amounts & formats please contact our technical commercial experts or your branch of reference. pH ADJUSTMENT OF THE BREWING WATER & WORT

| BIOTECHNOLOGY | ACID PFG | | |
|-----------------|--|---|--|
| BIOTE | APPEARANCE Liquid | FEATURES | |
| | brewhouse yield and reduces the polyp | brewing water and wort. Improves the mashing efficiency, henol extraction during mashing and provides a source of t. Added to the brewing water 10/15 minutes after mashing | |
| RE | DOSAGE RECOMMENDATION | DEPENDING ON THE ORIGINAL pH OF THE BREWING WATER, MASH AND WORT. | |
| CORE | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE. CRYSTALLIZATION SENSITIVE PRODUCT. KEEP THE PRODUCT AT TEMPERATURES ABOVE 10°C. | |
| | LACTIC ACID | | |
| WORT TREATMENT | APPEARANCE Liquid | FEATURES | |
| BREWING WATER & | Lactic Acid is an acidifying agent for pH adjustment of brewing water, mash and wort. It improves mashing efficiency, brewhouse yield and reduces the extraction of polyphenols during mashing. Added to the brewing water after mash-in or directly to the wort. | | |
| B | DOSAGE RECOMMENDATION | DEPENDING ON THE ORIGINAL pH OF THE BREWING WATER, MASH AND WORT. | |
| | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE. CRYSTALLIZATION SENSITIVE PRODUCT. KEEP THE PRODUCT AT TEMPERATURES ABOVE 10°C. | |
| WATER & WORT | MIX ACID CL | | |
| OF THE BREWING | APPEARANCE Liquid | FEATURES GMO FREE FREE | |
| pH ADJUSTMENT | Acidifying agent for pH adjustment of brewing water, mash and wort. Improves the mashing efficiency, brewhouse yield, reduces the extraction of oxidizable polyphenols during mashing and extent the beer flavour stability. Added to the brewing water after mash-in or directly to the wort. | | |
| - | DOSAGE RECOMMENDATION | DEPENDING ON THE ORIGINAL pH OF THE BREWING WATER, MASH AND WORT. | |
| 4 | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE. CRYSTALLIZATION SENSITIVE PRODUCT. KEEP THE PRODUCT AT TEMPERATURES ABOVE 10°C. | |

| PREVENTION OF HOT WORT OXIDATI | ION | | | |
|---|--|----------------------------------|--|--|
| ANTIOXIN SBT | | BIOTECHNOLOGY | | |
| APPEARANCE Powder | | BIOTE | | |
| New generation of antioxidant specially designed for the treatment of malted and unmalted cereals in the brewhouse. It inhibits LOX (i.e. lipoxygenase) activity responsible for the oxidation of lipids, the formation of aldehydes (i.e. trans-2-nonenal) and other oxidizable compounds present in the wort. Extends the beer flavour stability. | | | | |
| DOSAGE RECOMMENDATION | 5-10 G/hL OF WORT DURING MASH-IN OR AFTER WORT BOILING. | CORE | | |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | | | |
| | | JSE | | |
| GALLOBREW | | BREWHOUSE | | |
| APPEARANCE Powder | FEATURES | | | |
| | FREE FREE | | | |
| A very purified gallotannin, which does not cause any undesired bitter or astringent flavours in beer. The high reactivity towards haze active (HA) proteins and enzymes (i.e. laccase, lipoxygenase, and others) optimises the wort clarification and prevents beer oxidation. It does not alter the beer colour and eliminates all traces of unwanted aromas by removing heavy metals. | | | | |
| DOSAGE RECOMMENDATION | 7.5-10 G/hL OF WORT DURING MASH-IN OR AFTER WORT BOILING. | WOR. | | |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | | | |
| | | PREVENTION OF HOT WORT OXIDATION | | |

BREWHOUSE ENZYMES

| BIOTECHNOLOGY | ENDOZYM [®] ALPHAMYL SB1 | | |
|-------------------|---|---|--|
| BIOTE | APPEARANCE Liquid | FEATURES | |
| ζE | during cereal cooking and mashing in or | origin. It is used at higher temperatures in the brewhouse der to facilitate the hydrolysis of starch into maltose, he main advantages are a quick reduction of the viscosity in ld. | |
| CORE | TEMPERATURE | 65 - 105°C | |
| | рН | 5.0 - 7.0 | |
| | DOSAGE RECOMMENDATION | 200-300 G/T OF MALT ADDED DURING MASH-IN OR CEREAL COOKER. | |
| | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. | |
| BREWHOUSE | ENDOZYM® AN Appearance Liquid | FEATURES | |
| | · · · · · · | FREE FREE se capable of hydrolyzing the alpha-1,4 and alpha-1,6 tion allows the complete conversion of liquefied starch into | |
| BREWHOUSE ENZYMES | | | |
| USE E | TEMPERATURE | 50 - 65°C | |
| REWHC | pH | 4.5 - 6.0 | |
| B | DOSAGE RECOMMENDATION | 500-1000 G/T OF MALT ADDED DURING MASH-IN OR CEREAL COOKER. | |
| | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. | |
| | | | |

BREWHOUSE ENZYMES

ENDOZYM[®] BREWMIX PLUS

APPEARANCE Liquid FEATURES



Enzymatic preparation preventing most of the quality defects of raw materials (malt and unmalted cereals). The beta-glucanase and cellulase activities guarantee the mash filterability. The alpha-amylase guarantees the saccharification of starch, therefore the brewhouse yield; neutral protease activity enables the production of RAN (Readily Assimilable Nitrogen) for yeast nutrition. It also contains β -glucanases, pentosanase, cellulase, xylanase and arabanases that improve the wort filterability, the brewhouse yield and the beer filtration.

| TEMPERATURE | 50 - 75°C |
|-----------------------|---|
| рН | 4.5 - 7.0 |
| DOSAGE RECOMMENDATION | 300-800 G/T OF MALT ADDED DURING MASH-IN. |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |

ENDOZYM[®] GLUCACEL UHT

APPEARANCE Liquid Thermostable β -glucanase with pentosanase, cellulase, xylanase and arabanase activity. It promotes the increase of mash filtration cycles and reduces the wort viscosity. Therefore, it optimizes the brewhouse yield and beer filtration performance.

| TEMPERATURE | 50 - 75°C |
|-----------------------|---|
| рН | 4.5 - 7.0 |
| DOSAGE RECOMMENDATION | 200-300 G/T OF MALT ADDED DURING MASH-IN OR CEREAL COOKER. |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |

B

BIOTECHNOLOGY

CORE

BREWHOUSE

| | WORT CLARIFICATION | | |
|--------------------|---|--|--|
| BIOTECHNOLOGY | POLYGEL BH | | |
| BIOTE | APPEARANCE | FEATURES | |
| - | Powder | GMO (ALLERGEN) | |
| | | FREE | |
| | - | plecular weight proteins and polyphenols. It also acts as Preserves beer colour, aroma and taste. To be dosed at | |
| CORE | DOSAGE RECOMMENDATION | 10-40 G/hL OF WORT. | |
| | STORAGE | IT IS A SLIGHTLY HYGROSCOPIC PRODUCT AND MUST THEREFORE BE STORED IN A DRY PLACE. | |
| | | | |
| | SPINDASOL SB1 | | |
| | | | |
| | APPEARANCE | | |
| | APPEARANCE Liquid | FEATURES | |
| ECATION | | FEATURES | |
| WORT CLARIFICATION | Liquid Colloidal solution of silica with selective charge. Allows clarification of hot wort wi | FEATURES | |
| WORT CLARIFICATION | Liquid Colloidal solution of silica with selective charge. Allows clarification of hot wort wi cone. Improves colloidal stability, sedimen | FEATURES FEATURES FEED FEED FEED FEED FEATURES FE | |
| WORT CLARIFICATION | Liquid Colloidal solution of silica with selective charge. Allows clarification of hot wort wi cone. Improves colloidal stability, sedimen filterability of beer. | FEATURES Exact in the surface area, particle size and th the objective of retaining cloudiness in the trub station of yeast during maturation and therefore the | |

| YEAST NUTRIENTS | | | |
|---|---|-----------------|--|
| FERMOCEL SB | | BIOTECHNOLOGY | |
| APPEARANCE Liquid | FEATURES GMO FREE FREE FREE | BIOTE | |
| Biological and physical-biological regulator, fer indispensable mineral elements and vitamins neede | | | |
| DOSAGE RECOMMENDATION | 15-30 ML/hL OF WORT. | щ | |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | CORE | |
| | | | |
| | | FERMENTATION | |
| FERMOPLUS® FRU | JITY | FERMEN | |
| APPEARANCE Powder | FEATURES GMO FREE FREE | | |
| Brewing yeast nutrient with specific natural amino acids, ideal for obtaining beers with high tropical aromatic profile that synergistically enhances hop aroma with pleasant tropical fruit character. | | | |
| DOSAGE RECOMMENDATION | 20-40 G/hL DURING WORT COOLING. | RIENTS | |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | YEAST NUTRIENTS | |
| | | λε | |
| | | 9 | |

| | YEAST NUTRIENTS | | |
|-----------------|--|---|--|
| BIOTECHNOLOGY | FERMOPLUS® FRAGRANCE | | |
| BIOTI | APPEARANCE | FEATURES | |
| | Powder | GMO FREE FREE | |
| | Brewing yeast nutrient with specific natural amino acids, ideal for obtaining beers with high floral aromatic profile that synergistically enhances hop aroma with elegant floral fragrance. | | |
| | DOSAGE RECOMMENDATION | 20-40 G/hL DURING WORT COOLING. | |
| CORE | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | |
| | FERMOPLUS® GS | H | |
| | APPEARANCE | FEATURES | |
| - | Powder | GMO FREE FREE. | |
| FERMENTATION | Brewing yeast nutrient with antioxidant action for the improvement of the flavour stability of the beer produced. Patented nutrient based on yeast hulls, autolysates of yeast and thiamine hydrochloride (vitamin B1) and naturally contains 120 mg/kg of zinc necessary for the viability of the yeast. | | |
| | DOSAGE RECOMMENDATION | 25-100 G/hL DURING WORT COOLING. | |
| | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | |
| | FERMOPLUS® IN | TEGRATEUR SB | |
| S | APPEARANCE Powder | FEATURES | |
| YEAST NUTRIENTS | | GMO FREE FREE FREE | |
| | The balanced formulation of Fermoplus Integrateur SB promotes yeast vitality and thus produce beers without organoleptic defects caused by poor fermentation. It is composed of organoleptically inert yeast hulls, ammonium phosphate bipotassium, ammonium salt, thiamine hydrochloride and naturally contains 130 mg/kg of zinc necessary for the viability of the yeast. | | |
| | DOSAGE RECOMMENDATION | 25-50 G/hL DURING WORT COOLING. | |
| 40 | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | |
| 10 | | | |

FERMOLAGER BERLIN

APPEARANCE Powder FEATURES

YEAST STRAIN Saccharomyces pastorianus

| BEER | FLAVOU | R |
|------|--------|---|
| Ŵ | Þ | ф |

German bottom fermenting yeast strain selected by the Technical University of Berlin. Rather neutral flavour profile, slightly fruity esters tones with a soft and round mouthfeel. Used for the production of wide spectrum of lagers; e.g. Pils, Helles, Dark Lager, Bock & Doppelbock.

| BEER STYLES | ALL TYPE OF LAGERS (I.E. LOW ALCOHOL TO STRONG LAGERS) AND CALIFORNIA COMMON. |
|--------------------------------|---|
| FAST FERMENTATION KINETICS | 3 DAYS AT 22°C, 13 DAYS AT 12°C FOR 12°P |
| FERMENTATION TEMPERATURE RANGE | 10-22°C |
| APPARENT ATTENUATION | 87% |
| FLOCCULATION & SEDIMENTATION | VERY HIGH |
| | |
| DOSAGE RECOMMENDATION | 80-100 G/hL OF 12°C TO 20°C COLD WORT |
| VIABILITY | > 1 X 10 ¹⁰ CFU/G |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |

FRUOUR BALAN **BEER FLAVOUR PROFILE** WITH FERMOLAGER BERLIN (ACCORDING TO ASBC & DLG) 12°P 12°C AROM PARA (fr) 4ARMING U ď BITTER GRASSY 僗 K/ SPICY SWEET O O VILLA ₽ € S 4CIDIC

BOTTOM FERMENTING YEASTS

BIOTECHNOLOGY

CORE

FERMENTATION

BOTTOM FERMENTING YEASTS

FERMOLAGER W

APPEARANCE Powder



YEAST STRAIN Saccharomyces pastorianus BEER FLAVOUR

German bottom fermenting yeast selected by Technical University of Munich Weihenstephan. The aromatic profile is neutral, fruity and very balanced. It is a high flocculating yeast and rapidly reduces diacetyl.

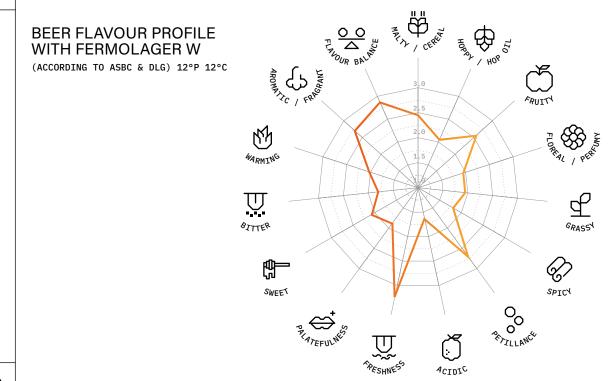
CORE

FERMENTATION

BIOTECHNOLOGY

| BEER STYLES | ALL TYPE OF LAGERS |
|--------------------------------|--|
| FAST FERMENTATION KINETICS | 3 DAYS AT 22°C, 13 DAYS AT 12°C FOR 12°P |
| FERMENTATION TEMPERATURE RANGE | 10-22°C |
| APPARENT ATTENUATION | 87% |
| FLOCCULATION & SEDIMENTATION | HIGH |
| | |

| DOSAGE RECOMMENDATION | 80-100 G/hL OF 12°C TO 20°C COLD WORT |
|-----------------------|---|
| VIABILITY | > 1 X 10 ¹⁰ CFU/G |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |



BOTTOM FERMENTING YEASTS

TOP FERMENTING YEASTS FERMOALE BIOTECHNOLOGY BEER FLAVOUR APPEARANCE FEATURES YEAST STRAIN Powder Saccharomyces Image: A state of the state GMO cerevisiae EREE

Fermoale is a top fermenting yeast strain for brewing ales. It originates from Scotland. It provides a very fruity and citrus flavour profile in beer. Fermoale is a low flocculating yeast. It can also be used for production of modern ciders.

| BEER STYLES | ALL TYPE OF ALES AND MODERN CIDERS. | CORE |
|--------------------------------|--|----------|
| FAST FERMENTATION KINETICS | FAST. 8 DAYS AT 22°C, 16 DAYS AT 12°C FOR 12°P | |
| FERMENTATION TEMPERATURE RANGE | 12-25°C | |
| APPARENT ATTENUATION | 87% | |
| FLOCCULATION & SEDIMENTATION | MEDIUM-HIGH | |
| | | |
| DOSAGE RECOMMENDATION | 50-100 G/hL OF 12°C TO 20°C COLD WORT | |
| VIABILITY | > 1 X 10 ¹⁰ CFU/G | NO |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, | ENTATION |

ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C.

BEER FLAVOUR PROFILE WITH FERMOALE (ACCORDING TO ASBC & DLG) 18°P 22°C



FERMENTING YEASTS

ГОР

FERMENT

TOP FERMENTING YEASTS

FERMOALE AY3

APPEARANCE Powder



YEAST STRAIN Saccharomyces cerevisiae

BEER FLAVOUR (III) Ĩ Č

English top fermenting yeast strain. It confers a fruity citrusy and well balanced estery flavour profile with a soft and round palate. Ideally expressed on high temperatures and on worts with low to medium density.

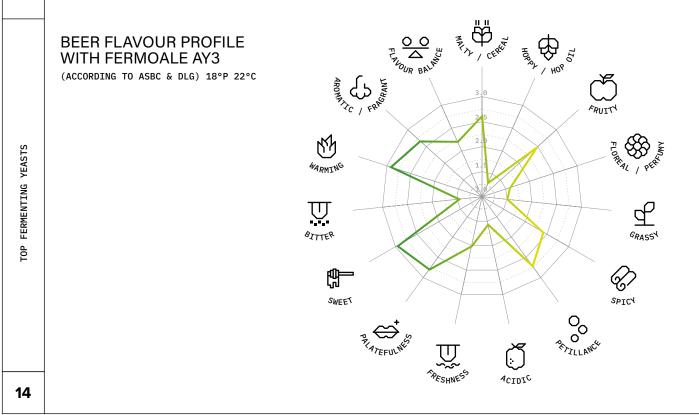


FERMENTATION

3IOTECHNOLOGY

| BEER STYLES | ALL TYPE OF ENGLISH-, IRISH-, BELGIAN- AND FRENCH ALES. VERY VERSATILE. |
|--------------------------------|--|
| FAST FERMENTATION KINETICS | FAST. 7 DAYS AT 22°C, 13 DAYS AT 12°C FOR 12°P |
| FERMENTATION TEMPERATURE RANGE | 12-22°C |
| APPARENT ATTENUATION | 87% |
| FLOCCULATION & SEDIMENTATION | HIGH |
| | |

| DOSAGE RECOMMENDATION | 50-100 G/hL OF 12°C TO 20°C COLD WORT |
|-----------------------|---|
| VIABILITY | > 1 X 10 ¹⁰ CFU/G |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |



TOP FERMENTING YEASTS **FERMOALE AY4 3IOTECHNOLOGY** BEER FLAVOUR APPEARANCE FEATURES YEAST STRAIN Powder Saccharomyces GMO cerevisiae FREE American top fermenting yeast strain. It confers a very neutral flavour profile, well balanced with a fresh and tender mouthfeel. Ideally for high temperatures. It allows for the expression of other brewing raw materials (i.e. malt and hops) flavours. Ideal for American IPA production. CORE BEER STYLES ALL TYPE OF AMERICAN ALES. VERY VERSATILE. FAST FERMENTATION KINETICS FAST. 7 DAYS AT 22°C, 13 DAYS AT 12°C FOR 12°P FERMENTATION TEMPERATURE RANGE 12-28°C APPARENT ATTENUATION 89% FLOCCULATION & SEDIMENTATION HIGH DOSAGE RECOMMENDATION 50-100 G/hL OF 12°C TO 20°C COLD WORT FERMENTATION VIABILITY > 1 X 1010 CFU/G STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. STORAGE

BEER FLAVOUR PROFILE WITH FERMOALE AY4 (ACCORDING TO ASBC & DLG) 18°P 22°C



FERMENTING YEASTS

Ъ

| TOP FERMENTING YEASTS | | | | | |
|-----------------------|--|--|---|---|--|
| BIOTECHNOLOGY | FER | MOALE | BEL- | BBEY | |
| BIOT | APPEARANCE Powder | FEATURES | YEAST STRAIN Saccharomyces cerevisiae | | BEER FLAVOUR |
| CORE | Fermoale Bel-Abbey is a dry active top fermenting yeast strain especially selected for fermentation of a wide spectrum of Belgian style ales such as Abbey styles (i.e. Enkel, Dubbel, Tripel & Quadrupel), Belgian Pale-, Dark Strong Ale, Belgian Blonde- and Pale Ale. This strain confers a complex yet very clean and delicate fruity and phenolic flavour character with reminiscences of dried fruits such as figs, raisins, plums and dates in harmony with the maltiness and alcohol content of the designed beer. | | | | |
| | BEER STYLES | | DUBBEL, TRIPEL & | S SUCH AS ABBEY STYLES (I.E. ENKEL, QUADRUPEL), BELGIAN PALE-, DARK AN BLONDE- AND PALE ALE. | |
| | FERMENTATIO | N TEMPERATURE RANGE | | 16-24°C | |
| | FLOCCULATIO | N & SEDIMENTATION | | MEDIUM | |
| | | | | | |
| NO | DOSAGE RECO | MMENDATION | | 40-80 G/hL AT 16- | 24°C |
| FERMENTATION | VIABILITY | | | > 0.5 X 10 ¹⁰ CFU/G | i |
| FERM | STORAGE | | | | ED CONTAINER, IN A CLEAN, DRY AND AWAY FROM DIRECT LIGHT AND HEAT, EMPERATURE <20°C. |
| | WITH FERM | /OUR PROFILE MOALE BEL-AB asbc & dlg) 18°P 22° | ہ ۃ | Property of the second | [#] [±] / ₁ , [±] / ₂ , [±] / ₁ , |
| TOP FERMENTING YEASTS | | | | | 20 15 15 GRASS ⁴ GRASS ⁴ SPIC ⁴ O SPIC ⁴ |
| 16 | | | | PESHN | ees acidic |

TOP FERMENTING YEASTS FERMOALE D'LA GRANGE **BIOTECHNOLOGY** BEER FLAVOUR APPEARANCE FEATURES YEAST STRAIN Powder Saccharomyces @ ∅ ∅ ₥ GMO cerevisiae var. diastaticus Fermoale D'la Grange is a versatile dry active top fermenting yeast strain especially selected for fermentation of French & Belgian Saison styles, and Bière de Garde style as well. This high attenuating strain confers a soft fruity, citrusy and phenolic spicy flavour notes, with a refreshing, high drinkable and crispy character, yet with a rich mouthfeel. CORE FRENCH SAISON, BELGIAN SAISON AND BIÈRE DE GARDE STYLE. BEER STYLES VERY VERSATILE. FERMENTATION TEMPERATURE RANGE 16-24°C LOW FLOCCULATION & SEDIMENTATION DOSAGE RECOMMENDATION 40-80 G/hL AT 16-24°C VIABILITY > 0.5 X 1010 CFU/G = ERMENTATION STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. STORAGE MALZ. FLANOUR BALLA 、^{но}в 各 ミ **BEER FLAVOUR PROFILE** WITH FERMOALE D'LA GRANGE AROMPATIC FRANC (ACCORDING TO ASBC & DLG) 18°P 22°C (K) FERMENTING YEASTS ARMING BITTER GRASS ГОР 贷 SPIC SWEET °°

ACIDIC

TOP FERMENTING YEASTS

WEISS AROME+

APPEARANCE Powder



YEAST STRAIN Saccharomyces cerevisiae

BEER FLAVOUR @ {.5 �

Top fermenting yeast for the production of wheat beers such as Blanche, American Wheat and Weiss. Weiss Arome+ has excellent fermentation capacity. This yeast has a low flocculating capacity and remains in suspension even in the final beer product.

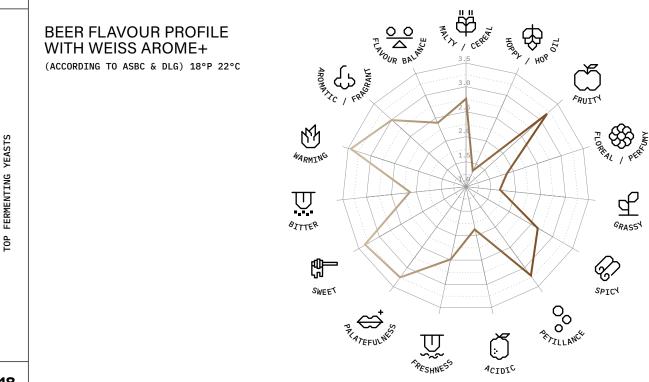
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FERMENTATION

3IOTECHNOLOGY

| BEER STYLES | WHEAT BEERS (I.E. WITBIER, WEISSBIER- / HEFEWEIZEN, KRISTALLWEIZEN). |
|--------------------------------|---|
| FAST FERMENTATION KINETICS | FAST. 10 DAYS AT 12°C, 5 DAYS AT 25°C FOR 12°P |
| FERMENTATION TEMPERATURE RANGE | 12-25°C |
| APPARENT ATTENUATION | 95% |
| FLOCCULATION & SEDIMENTATION | LOW |
| | |

| DOSAGE RECOMMENDATION | 50-100 G/hL OF 12°C TO 18°C COLD WORT |
|-----------------------|---|
| VIABILITY | > 1 X 1010 CFU/G |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |



| BOTTLE C | ONDITIONING Y | 'EASTS | | |
|------------------------------|--|--|-----------------------------------|---------------|
| FER | MO RO | 5 | | SIDTECHNOLOGY |
| APPEARANCE Powder | FEATURES | YEAST STRAIN Saccharomyces cerevisiae | BEER FLAVOUR | BIOTE |
| alcohol, rap simple sugar | id fermentation ki s, which facilitat | barrel fermentation (i.e. condition netics and highly flocculation prop es the dosage of sugars and the sta from the main first fermentation. | perty. Fermo R03 metabolizes only | |

| BEER STYLES | FOR ALL BOTTLE CONDITIONING BEERS. | CORE |
|--------------------------------|--|--------------|
| FAST FERMENTATION KINETICS | FAST. 10 DAYS AT 12°C, 5 DAYS AT 22°C FOR 12°P | |
| FERMENTATION TEMPERATURE RANGE | 12-25°C | |
| APPARENT ATTENUATION | 95% | |
| FLOCCULATION & SEDIMENTATION | VERY HIGH | |
| | | |
| DOSAGE RECOMMENDATION | FILTRATED BEER: 2-7 G/hL OF BEER NON-FILTRATED BEER: 4-5 G/hL OF BEER STRONG BEER (>6,0% ABV) >7,5%: 8-10 G/hL OF BEER | |
| VIABILITY | > 1 X 10 ¹⁰ CFU/G | TATIO |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, | FERMENTATION |

STORAGE ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C.

FERMENTATION ENZYMES

| BIOTECHNOLOGY | ENDOZYM® AGF | P 120 |
|----------------------|---|---|
| BIOTE | APPEARANCE Liquid | FEATURES |
| | Endozym AGP 120 is an enzymatic preparation pullulanases. Used for the treatment of bea Allows the hydrolysis of dextrins into ferm | - |
| CORE | TEMPERATURE | 10-20°C |
| | рН | 4.0-5.5 |
| | DOSAGE RECOMMENDATION | 5-15 G/hL OF WORT AT THE BEGINNING OF FERMENTATION. |
| | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |
| FERMENTATION | ENDOZYM® PRO | DTEASE GF features Features |
| FERMENTATION ENZYMES | Endozym Protease GF is an enzymatic formula (Competitive Elisa, mg/L) without affecting Due to its wide range of activities, degrad It has a very effective capacity in degrada head retention (NIBEM). • Proteolytic activities: > 450 U/g (EC N • Origin: Aspergillus niger and Bacillus se | g the head retention (NIBEM). dation extends to gluten proteins. ation of proteins, including gluten without affecting ° 232-642-4) |
| ERMENT | TEMPERATURE | 10-25°C |
| ш | рН | 4.5-7.0 |
| | DOSAGE RECOMMENDATION | 2-6 G/hL OF WORT AT THE BEGINNING OF FERMENTATION. |
| | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND |
| | | ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. |

BEER STABILIZATION

POLYGEL PS30

APPEARANCE Powder FEATURES



PREFERABLY AT A TEMPERATURE <20°C.

Protein and polyphenol beer stabiliser. This PVPP and silica gel-based formula builds highly stable complexes with polyphenolic substances in beer and also adsorbs protein substances. This product does not affect the beer colour, flavour and head retention.

| DOSAGE RECOMMENDATION | 30-70 G/hL OF BEER AT THE END OF FERMENTATION, ADDED DIRECTLY TO THE BUFFER TANK OR TO THE DOSING UNIT DURING OR BEFORE BEER FILTRATION. |
|-----------------------|--|
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURIESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. |

SPINDASOL SB3

APPEARANCE Liquid It is a specific silica sol for beer clarification. It improves the sedimentation of yeast in beer maturation/conditioning. This product is more effective if compared to the ordinary silica sols. This leads to a more efficient and quicker sedimentation, and thus reduces the amount of yeast in beer filtration and clarification.

DOSAGE RECOMMENDATION

20-40 ML/hL OF BEER AT THE END OF FERMENTATION.

STORAGE

STORE IN A COOL AND DRY PLACE, AWAY FROM DIRECT SUNLIGHT AND HEAT. KEEP AWAY FROM FROST (7°C MIN).

BEER STABILIZATION

BIOTECHNOLOGY

CORE

BREWHOUSE ENZYMES

| Torget particip programment of the production of RAM (Readily Assimilable Nitrogen) for yeast nutrition. Image: The second of the production of RAM (Readily Assimilable Nitrogen) for yeast nutrition. Image: The second of the production of RAM (Readily Assimilable Nitrogen) for yeast nutrition. Image: The second of the production of RAM (Readily Assimilable Nitrogen) for yeast nutrition. Image: The second of the production of RAM (Readily Assimilable Nitrogen) for yeast nutrition. Image: The second of the production of RAM (Readily Assimilable Nitrogen) for yeast nutrition. The second of the Nitrogen of the Ni | BIOTECHNOLOGY | ENDOZYM® PROT APPEARANCE Liquid | FEATURES |
|---|---------------|--|--|
| STORAGE DOURLESS PLACE, AMY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE -20°C. | INDUSTRIAL | concentrated peptidase activities allowing the mash-in in order to allow the production of RAN TEMPERATURE pH | release of amino acids and peptides. Added during (Readily Assimilable Nitrogen) for yeast nutrition. 45-55°C 5-8,5 |
| | | | ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, |

BEER STABILIZATION

POLYGEL PLUS

APPEARANCE

Powder

EREE

Pure PVPP formulation to stabilize polyphenols in beer. Allows adsorption of polyphenol complexes, limiting the appearance of chill haze.

DOSAGE RECOMMENDATION

5-50 G/hL

STORAGE

IT IS A SLIGHTLY HYGROSCOPIC PRODUCT AND MUST THEREFORE BE STORED IN A DRY PLACE.

PAPAYNASE NA

APPEARANCE Liquid



Original vegetable extract of papaya latex. It partially degrades the protective substances and micro-polypeptides responsible for colloidal instability in beer. It is used during the beer maturation. Thermal treatment (e.g. pasteurization) is required prior to bottling to stop the activity of this enzyme in final product.

| TEMPERATURE | 10-25°C |
|-----------------------|--|
| рН | 5.0-8.5 |
| DOSAGE RECOMMENDATION | 0.5-1 G/hL |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PRFERABLY AT A TEMPERATURE <20°C. |

SILIGEL S

APPEARANCE Powder

FEATURES



Siligel S is a pure silica gel with controlled humidity for the colloidal stabilization of Beer and can be used in association with other colloidal stabilizers such as PVPP. SiligelS adsorbs the proteins responsible for colloidal instability, which consequently are retained in the filter. It can also be used prior to filtration to optimize yeast flocculation with an optimal operation temperature of 20°C.

| DOSAGE RECOMMENDATION | 10-100 G/hL | |
|-----------------------|--|---|
| STORAGE | IT IS A SLIGHTLY HYGROSCOPIC PRODUCT AND MUST THEREFORE BE STORED IN A DRY PLACE. | 2 |

BEER STABILIZATION

BIOTECHNOLOGY

ENDUSTRIAL

| | ^ ^ / ^ | $ \wedge \wedge \cap $ | ENITO |
|-------|------------|------------------------|-------|
| JEEUA | ΔN | | ENTS |
| | | | |

| | DEFOAMING AGENTS | | | |
|------------------|--|--|--|--|
| BIOTECHNOLOGY | BATFOAM SB1 | | | |
| BIOTE | APPEARANCE Liquid | FEATURES | | |
| NEEDS | wort boiling or beer fermentation and allo | foaming agent designed to prevent foam formation during ow the full volume use of the fermentation tank capacity. o its high adsorption to the brewing yeast at the end of | | |
| =IC NI | DOSAGE RECOMMENDATION | 3-5 ML/hL | | |
| SPECIFIC | STORAGE | STORE PREFERABLY AT A TEMPERATURE <20°C. | | |
| | BEER STABILIZATION | | | |
| STABILIZATION | ENDOZYM® PE | CTOFRUIT | | |
| TABILI | APPEARANCE | FEATURES | | |
| & BEER | Liquid | GMO FREE FREE | | |
| DEFOAMING AGENTS | Enzymatic preparation with high content ir beers and ciders. | n pectinases selected to aid the clarification of fruit | | |
| | TEMPERATURE | 10-25°C | | |
| | рН | 3.0-6.0 | | |
| | DOSAGE RECOMMENDATION | 2-5 ML/hL IN UNFILTERED BEER. | | |
| | STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT, PREFERABLY AT A TEMPERATURE <20°C. | | |
| | | | | |

FILTRATION

EVERYTHING YOU NEED FOR THE FILTRATION OF YOUR BEER: FROM FILTRATION HOUSINGS AND THE FILTER ELEMENTS TO THE ADJUVANTS, THE POST-FILTRATION STABILIZERS AND THE TANNINS.

AEB | BREWING

=ILTRATION

Please note: the dosage recommendation may vary depending on the processing conditions selected by the brewer. The format is varied depending on the country of origin. For exact amounts & formats please contact our technical commercial experts or your branch of reference.

FILTER ELEMENTS

DANMIL FILTER ELEMENTS

MADE BY

PROCESS STEP

Process & rinse water treatment

| NAME OF PRODUCT | APPLICATION | TECHNICAL CHARACTERISTICS | FILTRATION CAPACITY (NUMBER & SIZE OF FILTER ELEMENTS) |
|---|--|---------------------------------------|---|
| BREW-PURE is a cartridge or bag pre-filter [1-5 μm size]. | Securing the microbiological quality of the brewing water. Depending on location and water quality, carbon filters may be needed to adsorb chlorine. | Optional: • UV light disinfection. | 20 hL/h - Mini bag 2L 50 hL/h - Bag 7" x 1L 100 hL/h - Bag 7" x 1L 150 hL/h - Bag 7" x 2L 200 hL/h - Bag 7" x 2L UV design to be discussed when needed, DANMIL have several options depending on customer need or placing. |

PROCESS STEP

Beer polishing filtration

| NAME OF PRODUCT | APPLICATION | TECHNICAL CHARACTERISTICS | FILTRATION CAPACITY (NUMBER & SIZE OF FILTER ELEMENTS) |
|---|---|--|---|
| BREW SHINE PP is a cartridge with graded multilayer PP structure, easy | Securing crystal clear beer. 3 µ for Ales* | Thermo-welded polypropylene filter media, with no electric charge Porosity 1, 3, 5, 10 µm, with absolute particle degree § 5000 | 20 hL of beer/h - 3 x 20" 50 hL of beer/h - 3 x 30" 100 hL of beer/h - 8 x 30" 150 hL of beer/h - 12 x 30" |
| back washable to ensure long service life span. | 1 μ for Lagers* *Alternative options depending on customer requirements. | Wide compatibility with regenerating and sanitizing products Food grade Configuration suitable for frequent chemical regeneration. | Size guide: 4 hL of beer/h per 10". |

PROCESS STEP

Beer packaging (canning, bottling & kegging)

| NAME OF PRODUCT | APPLICATION | TECHNICAL CHARACTERISTICS | FILTRATION CAPACITY (NUMBER & SIZE OF FILTER ELEMENTS) |
|---|--|--|---|
| BREW FREE C is a cartridge with special media filter designed for pre-filtration also known as police filtration to reduce the levels of chill & permanent haze and yeast in beer prior final cold sterile filtration. | Beer pre-filtration, also known as police filtration. | Thermo-welded polypropylene filter media, with no electric charge Porosity ≤ 0.6 µm, with absolute particle degree ß 5000 Wide compatibility with regenerating and sanitizing products Food grade Configuration suitable for frequent chemical regeneration. | 20 hL of beer/h - 3 x 20" 50 hL of beer/h - 3 x 30" 100 hL of beer/h - 8 x 30" 150 hL of beer/h - 12 x 30" Size guide: 4 hL of beer/h per 10". |

FILTRATION

CORE

FILTER ELEMENTS

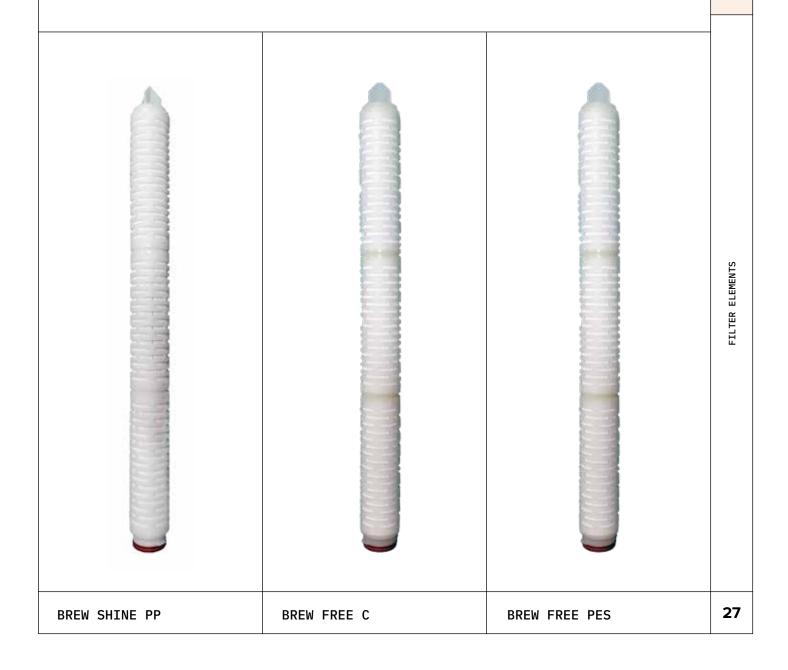
PROCESS STEP

Beer packaging (canning, bottling & kegging)

| NAME OF PRODUCT | APPLICATION | TECHNICAL CHARACTERISTICS | FILTRATION CAPACITY (NUMBER & SIZE OF FILTER ELEMENTS) |
|--|---|---|---|
| BREW FREE PES is a cartridge filter for final cold sterile filtration. It is highly recommended for production of non-alcoholic beers when using arrested/interrupted fermentation. | Securing beer biological stabilisation. | Hydrophilic polyethersulfone membrane with asymmetric pore structure, with no electric charge Absolute porosity 0.45µm, microbiological protection is defined by specific microorganisms Membrane integrity testable multiple times Wide compatibility with regenerating and sanitizing products Food grade Configuration suitable for frequent chemical regeneration. | 20 hL of beer/h - 3 x 20" 50 hL of beer/h - 3 x 30" 100 hL of beer/h - 8 x 30" 150 hL of beer/h - 12 x 30" Size guide: 4 hL of beer/h per 10". |

CORE

Other brewing applications where DANMIL filter products can be used are: compressed air at point of use, bottle rinsing, wort aeration, storage tank venting, steam and CO₂ filtration. We offer a complete range of filtration products that can be used also for housings and plug & play filter plant skids.



FILTER HOUSINGS

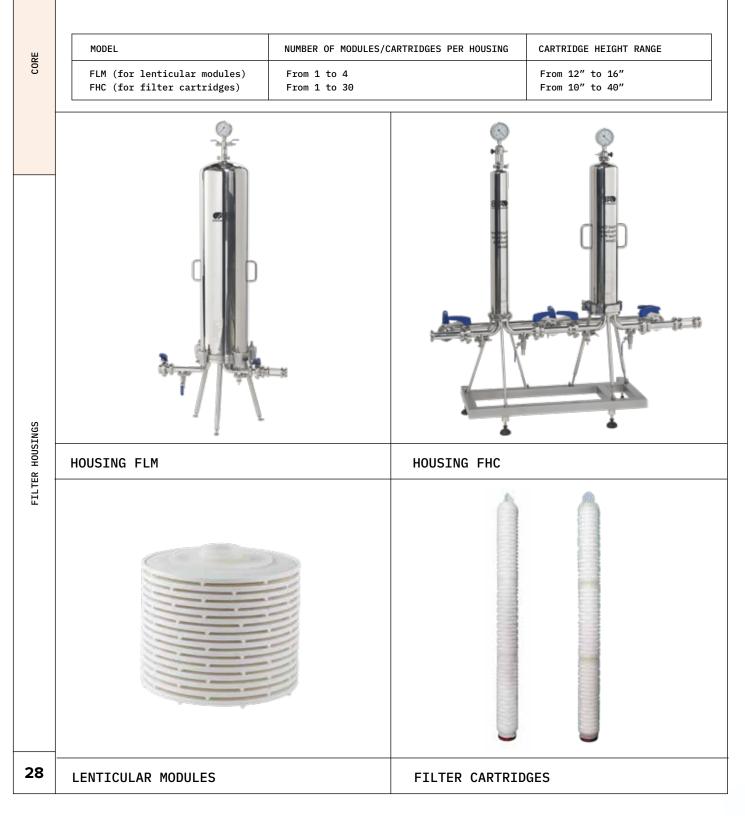
FILTER HOUSINGS FLM & FHC

MADE BY

FILTRATION



The housings represent a combination of plants, equipment and accessories for housing and commissioning the different ranges of cartridges and lenticular modules. The materials are all certified and in accordance to an utilization in complete safety.



| ANTIOXIN SB | | FILTRATION | |
|--|---|-----------------|--|
| APPEARANCE Powder | | FIL | |
| A stabilizer specifically created by AEB to prote protection against oxygen which enables to extend life of the beer product. | | | |
| DOSAGE RECOMMENDATION | 2-4 G/hL ADDED DURING MATURATION, PRIOR TO BOTTLING OR AT THE END OF THE FILTRATION. | CORE | |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | | |
| TAN WBT | | | |
| APPEARANCE Powder | | POST-FILTRATION | |
| TAN WBT is a selected tannin, especially developed by AEB Group for German and Belgian wheat beers to maintain their haze properties. TAN WBT is manufactured from ground wood (wood powder). The tannin is extracted using water at 100°C after which it is concentrated and dried though atomisation, providing the appropriate polyphenol balance. | | | |
| DOSAGE RECOMMENDATION | 2-15 G/hL OF BEER BEFORE PACKAGING. | | |
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | | |
| | | | |

FILTRATION ADJUVANTS

FIBROXCEL 10 AND 30

APPEARANCE

Powder

Chemically inert filter aids used during beer filtration for pre-coating. The product is a uniform blend of perlites and cellulose, which forms a honeycomb structure that remains in place throughout filtration. These filter aids have a high adsorption capacity throughout the entire filtration cycles.

DOSAGE R

STORAGE

| RECOMMENDATION | 50-500 G/hL OF BEER DURING FILTRATION IN CONTINUOUS FLOW. FIBROXCEL 30: 800-1000 G/M ² IN PRECOATING FORMATION; 10-20 G/hL OF BEER DURING FILTRATION IN CONTINUOUS FLOW. |
|----------------|---|
| E | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. |

FIBROXCEL 10: 500-1000 G/M² IN PRECOATING FORMATION;

FIBROXCEL UNI

APPEARANCE Powder

Single pre-coat for the reduction of total filter aid volume required for pre-coating, in terms of g/hL dosage up to 30% can be achieved. It reduces the time for preparing and cleaning of the filter by 50%. Quality is improved during filtration thanks to the cellulose compound. Longer filtration runs thanks to larger admissible volume capacity.

| DOSAGE RECOMMENDATION | 700-1000 G/M ² PRECOATING FORMATION | |
|-----------------------|--|--|
| STORAGE | STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT. | |

FILTRATION ADJUVANTS

SILITE

APPEARANCE Powder

Silite range are chemically inert filter aids. In continuous dosing filtration, filter aids are used for delaying the clogging of the filtering layer, forming a porous structure which remains stable throughout the entire filtration period. Filter aids deeply blend with particles building turbid matter and make the coat uncompressible.

Silite Mini Speed is a very fine perlite, with low flow-speed used for tight filtrations, especially the polishing ones.

Silite Normal Speed has a medium permeability, it is recommended for all uncomplicated filtrations. It is used for normal filtrations.

Silite High Speed is characterized by a high permeability, ideal for very hazy liquids with high content of suspended solids. It is classified as a perlite for coarse filtrations.

| DOSAGE RECOMMENDATION | 10-100 G/hL IN CONTINUOUS FLOW. | |
|-----------------------|--|--|
| | STORE IN THE SEALED CONTAINED IN A CLEAN DRY AND | |

STORAGE

SPINDACEL N, R, XX

APPEARANCE Powder

Spindacel range are obtained by blending perlites of various granulometries and porosities with special celluloses. The Spindacel products are characterized by an apparent specific weight, which makes their use 20-30% less than that of traditional diatomaceous earths. The Spindacel products are completely diatom-free and therefore completely safe with regard to health.

Spindacel N is used for tight filtrations.
Spindacel R is used for normal filtrations.
Spindacel XX is used for coarse filtrations.

DOSAGE RECOMMENDATION

10-100 G/hL IN CONTINUOUS FLOW.

STORAGE

STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT.

ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT.

FILTRATION ADJUVANTS

FILTRATION

INDUSTRIAL

FILTRATION ADJUVANTS

| FILTRATION | APPEARANCE Powder |
|--|--|
| INDUSTRIAL | The Spindalite ra chemically inert achieve a very lo Spindalite N is u Spindalite R is u Spindalite XX is DOSAGE RECOMMEND. STORAGE |
| FILTRATION ADJUVANTS & POST-FILTRATION | POST-FILTRATI |
| | ARABI |
| | APPEARANCE Powder |
| | Arabinol SB5 is a acid complexes, i colloid for beer |
| | DOSAGE RECOMMENDA |

ALITE N, R, XX

ange is composed of a specific granulometry of kieselguhr. These aids are and filter by adsorptive and surface filtration. Spindalite allows the brewer to w turbidity and consequently a bright and crystal clean beer.

sed for tight filtrations. sed for normal filtrations. used for coarse filtrations.

ATION

10-100 G/hL IN CONTINUOUS FLOW.

STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT.

ON

NOL® SB5

FEATURES



naturally occurring polysaccharide, consisting of arabans, galactans and uronic n association with polypropylene glycol alginate, which is used as a hydrophilic. head retention.

ATION

1-7 G/hL OF FILTERED OR STORED BEER

STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND

ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT.

STORAGE

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POST-FILTRATION

ARABINOL® MULTINSTANT SB

APPEARANCE Powder

FEATURES



It is a natural polysaccharide used to stabilize head retention and promote beer mouthfeel. Its performance is superior to other aids based on liquid arabic gum. Once dissolved in water, the solution can be added to beer before bottling.

DOSAGE RECOMMENDATION

1-7 G/hL OF FILTERED OR STORED BEER

STORAGE

STORE IN THE SEALED CONTAINER, IN A CLEAN, DRY AND ODOURLESS PLACE, AWAY FROM DIRECT LIGHT AND HEAT.



FILTRATION

SPECIFIC NEEDS

SANITATION

THE HYGIENE FIRST OF ALL: ALCALINE, CHLORINATED, ACID, ENZYMATIC AND FOAM DETERGENTS TO ENSURE A PERFECT SANITATION OF THE BREWERY. PLUS A COMPLETE LINE OF LUBRICANTS TO OPERATE IN TOTAL SAFETY OBTAINING THE BEST PERFORMANCE. SANITATION

Please note: the dosage recommendation may vary depending on the processing conditions selected by the brewer. The format is varied depending on the country of origin. For exact amounts & formats please contact our technical commercial experts or your branch of reference. CORE

REMOVIL LIQUID

APPEARANCE

Liquid

High causticity alkaline detergent suitable for the cleaning of brewhouses, heat exchangers, pipes, fermentation tanks and filling devices.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | LIGHT BROWN LIQUID |
|--------------------------|--------------------|
| pH (1% SOLUTION) | >12 |
| RELATIVE DENSITY AT 20°C | 1.50 ± 0.05 |
| USE TEMPERATURE | 20-80°C |
| SUGGESTED CONCENTRATION | 1-3% |

X5S/S

APPEARANCE Liquid

Alkaline monophase detergent, characterized by high sequestering action, able to easily remove both organic and inorganic contamination from surfaces. The formulation of this product allows the brewer to decrease over time the amount of acid descaling required, even in situations where hard water is required for cleaning, ultimately saving time and costs of cleaning procedures. Suitable for monophase cleaning of brewhouses, heat exchangers, pipes, fermentation tanks and filling devices, moreover for periodic strong cleaning operation of fermentation tanks and BBT.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | COLORLESS CLEAR LIQUID |
|--------------------------|------------------------|
| pH (3% SOLUTION) | >12 |
| RELATIVE DENSITY AT 20°C | 1.30 ± 0.05 |
| USE TEMPERATURE | 50-80°C |
| SUGGESTED CONCENTRATION | 1-3% |

NERLIK LIQUID

APPEARANCE

Liquid

Alkaline detergent for bottle washing and stainless steel kegs. Thanks to its high sequestering action it is effective also with very hard water.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | BEIGE LIQUID |
|--------------------------|--------------|
| pH (1% SOLUTION) | 12.5 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.50 ± 0.05 |
| USE TEMPERATURE | 50-80°C |
| SUGGESTED CONCENTRATION | 0.8-3% |

MEMBRAN UF

APPEARANCE Liquid

Membran UF is a medium alkaline detergent with high sequestering action, suitable for monophase cleaning of filtration cartridges.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | LIGHT YELLOW CLEAR LIQUID |
|--------------------------|---------------------------|
| pH (1% SOLUTION) | 12.0 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.25 ± 0.05 |
| USE TEMPERATURE | 50-60°C |
| SUGGESTED CONCENTRATION | 0.5-1.5% |

ALKALINE AND CHLORINATED DETERGENTS

SANITATION

CORE

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ALKALINE AND CHLORINATED DETERGENTS

IDROSAN

APPEARANCE

Liquid

Alkaline chlorinated detergent with bleaching properties, suitable for sanitation of BBT, pipes and filling devices.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | LIGHT YELLOW CLEAR LIQUID |
|--------------------------|---------------------------|
| pH (1% SOLUTION) | 12.0 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.20 ± 0.05 |
| USE TEMPERATURE | 40-60°C |
| SUGGESTED CONCENTRATION | 1-3% |

ACID DETERGENTS

CELON SPECIAL

APPEARANCE Liquid

Descaling detergent based on nitric and phosphoric acid to remove inorganic scales from surfaces. It also acts as a passivating agent towards stainless steel surfaces and is suitable for removing "beerstone" (calcium oxalate). Celon Special is low foaming and therefore is ideal for CIP applications.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | LIGHT GREEN CLEAR LIQUID |
|--------------------------|--------------------------|
| pH (1% SOLUTION) | 2.0 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.20 ± 0.05 |
| USE TEMPERATURE | 20-70°C |
| SUGGESTED CONCENTRATION | 0.8-5% |

SANITATION

CORE

ADDING OX

APPEARANCE

Liquid

Liquid additive for alkaline cleaning solutions. Adding OX, when added into alkaline washing solutions, improves the cleaning effectiveness of the solution.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | COLORLESS CLEAR LIQUID | |
|--------------------------|--------------------------------|------|
| pH (0,5% SOLUTION) | 7.0 ± 0.5 | CORE |
| RELATIVE DENSITY AT 20°C | 1.20 ± 0.05 | |
| USE TEMPERATURE | >60°C | |
| SUGGESTED CONCENTRATION | 0.2-0.5% IN ALKALINE SOLUTIONS | |

ADIX LIQUID

APPEARANCE Liquid

Liquid additive for bottle washing and CIP applications. It prevents inorganic scales and foaming of alkaline solutions also when contaminated by organic contaminations.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | AMBER CLEAR LIQUID |
|--------------------------|-----------------------------------|
| pH (6% SOLUTION) | 6.50 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.05 ± 0.05 |
| USE TEMPERATURE | >50°C |
| SUGGESTED CONCENTRATION | 2-6% OF NAOH IN CAUSTIC SOLUTIONS |

ADDITIVES

SANITATION

ENZYMATIC DETERGENTS

REMOVIL ZYME

APPEARANCE

Powder

Removil Zyme is an enzymatic detergent in powder form, suitable for cleaning of equipment in both the brewhouse and cellar. It's able to remove organic scales in general and most of the hard to remove components of protein, starch and cellulose. Removil Zyme can be used both for specific washing operations aimed at recovering optimal cleaning levels and for routine treatments.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | WHITE AND GREY GRANULAR POWDER | |
|--------------------------|--------------------------------|--|
| pH (1% SOLUTION) | 11.5 ± 0.5 | |
| RELATIVE DENSITY AT 20°C | 1.01 ± 0.05 | |
| USE TEMPERATURE | 30-50°C | |
| SUGGESTED CONCENTRATION | 0.1-1.5% | |

FOAM DETERGENTS

SANIFOAM

APPEARANCE Liquid

DETERGENTS

FOAM

Ś

ENZYMATIC DETERGENTS

Sanifoam is a chlorinated alkaline foaming detergent to be used for the daily cleaning of surfaces. It is able to effectively remove different kinds of organic contamination. Excellent clinging power and rinsability make this product a very useful detergent. Sanifoam can also be applied with a wide range of equipment e.g. Easyfoam P, Combifoam, Foamlance, and centralized foam devices.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | YELLOW CLEAR LIQUID |
|--------------------------|---------------------|
| pH (1% SOLUTION) | 11.5 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.20 ± 0.05 |
| USE TEMPERATURE | ROOM TEMPERATURE |
| SUGGESTED CONCENTRATION | 3–6% |

SANITATION

MONOFOAM

APPEARANCE Liquid

Monofoam is an alkaline monofase foaming detergent to be used for the daily cleaning of surfaces. It is able to effectively remove different kinds of tenaceous organic contamination. The formulation of this product allows the brewer to decrease over time the amount of acid descaling required, even in situations where hard water is required for cleaning, ultimately saving time and costs of cleaning procedures. Monofoam can be applied with a wide range of equipment e.g. Easyfoam P, Combifoam, Foamlance and centralized foam devices.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | COLORLESS CLEAR LIQUID |
|--------------------------|------------------------|
| pH (1% SOLUTION) | 12.0 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.20 ± 0.05 |
| USE TEMPERATURE | ROOM TEMPERATURE |
| SUGGESTED CONCENTRATION | 3–6% |

CELOFOAM

APPEARANCE Liquid

Celofoam is an acid foaming detergent based on phosphoric acid to be used for the routine descaling of surfaces. Excellent clinging power and rinsability make this product a very useful detergent. Celofoam can be applied with a wide range of supply equipment e.g. Easyfoam P, Combifoam, Foamlance or centralized foam devices. Celofoam is compatible with most material normally present in food industries, if used according to the producer's indications.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | OLIVE GREEN CLEAR LIQUID |
|--------------------------|--------------------------|
| pH (6% SOLUTION) | 2.0 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.35 ± 0.05 |
| USE TEMPERATURE | ROOM TEMPERATURE |
| SUGGESTED CONCENTRATION | 3-6% |

-OAM DETERGENTS

SANITATION

CORE

FOAM DETERGENTS

CELOFOAM SF

APPEARANCE Liquid

Celofoam SF is an acid foaming detergent, able to effectively remove any kind of inorganic contamination and to be used for the routine descaling of surfaces. Excellent clinging power and rinsability make this product a very effective detergent. Celofoam SF can be applied with a wide range of supply equipment e.g. Easyfoam P, Combifoam, Foamlance or centralized foam devices. Celofoam SF is compatible with most material normally present in food industries, if used according to the producer's indications.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | COLORLESS CLEAR LIQUID |
|--------------------------|------------------------|
| pH (6% SOLUTION) | <2 |
| RELATIVE DENSITY AT 20°C | 1.15 ± 0.05 |
| USE TEMPERATURE | ROOM TEMPERATURE |
| SUGGESTED CONCENTRATION | 2-6% |

FOAM DETERGENTS

SANITATION

CORE

SINTODRY

APPEARANCE

Liquid

Sintodry is a liquid lubricant for dry lubrication of conveyors for bottles and cans, to be used on plastic chains.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | WHITE LIQUID | |
|--------------------------|------------------|--|
| pH (1% SOLUTION) | 5.0 ± 0.5 | |
| RELATIVE DENSITY AT 20°C | 1.00 ± 0.05 | |
| USE TEMPERATURE | ROOM TEMPERATURE | |
| SUGGESTED CONCENTRATION | READY TO USE | |

HYGIENIZERS



APPEARANCE Liquid

Percisan is a wide spectrum sanitizer based on peroxides. Suitable for CIP sanitation of fermentation tanks, heat exchangers, pipes, filtration cartridges and filling devices.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | COLORLESS CLEAR LIQUID |
|--------------------------|------------------------|
| pH (1% SOLUTION) | 2.95 ± 0.03 |
| RELATIVE DENSITY AT 20°C | 1.15 ± 0.05 |
| USE TEMPERATURE | ROOM TEMPERATURE |
| SUGGESTED CONCENTRATION | 0.8-1% |

LUBRICANTS & HYGIENIZERS

SANITATION

INDUSTRIAL

HYGIENIZERS

PERACID

APPEARANCE

Liquid

SANITATION

INDUSTRIAL

Peracid is a wide spectrum sanitizer based on Peracetic Acid. Suitable for CIP sanitation of fermentation tanks, heat exchangers, pipes, filtration cartridges and filling devices.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | COLORLESS CLEAR LIQUID |
|--------------------------|------------------------|
| pH (1% SOLUTION) | 3.0 ± 4.0 |
| RELATIVE DENSITY AT 20°C | 1.12 ± 0.05 |
| USE TEMPERATURE | ROOM TEMPERATURE |
| SUGGESTED CONCENTRATION | 0.2 - 1% |

X ACID LY

APPEARANCE Liquid

Broad-spectrum disinfectant composed of Peracetic Acid (5%) and hydrogen peroxide. Used for the disinfection of all installations.

TECHNICAL CHARACTERISTICS

| PHYSICAL APPEARANCE | COLORLESS CLEAR LIQUID |
|--------------------------|------------------------|
| pH (1% SOLUTION) | 3.0 ± 0.5 |
| RELATIVE DENSITY AT 20°C | 1.11 ± 0.05 |
| USE TEMPERATURE | ROOM TEMPERATURE |
| SUGGESTED CONCENTRATION | 0.2 - 1% |

HYGIENIZERS

FROM THE WASHING TO THE FOAMING EQUIPMENT UP TO THE DOSING AND THE LUBRICATION TECHNOLOGIES: WHATEVER YOUR NEED IS, WE HAVE THE RIGHT SOLUTION. EQUIPMENT

AEB | BREWING

CIP MIXER INOX 1000

MADE BY

CUIPMENT



The CIP MIXER INOX 1000 allows the brewer to prepare CIP solutions in variable percentages and to set up washing cycles that follow each other, rinsing and operating complelety automatically. The great advantage of the CIP mixer is its autonomy: up to 30 washing recipes can be saved, so it will be possible for the operator to move between the tanks and once the pipes are connected, start the inherent recipe and return to a completed wash cycle.

With the use of the pH meter it is possible to check the pH of the discharged rinses. Moreover, by accessing the page for traceability, it's possible to keep note of: recipe used, date and time of washing, operator and possible notes. The history of all washes can be downloaded and archived.



| MODEL | WASHING PUMP |
|-------------------------|--------------|
| CIP MIXER INOX 10-1000 | 10 Нр |
| CIP MIXER INOX 5.5-1000 | 5.5 Нр |

MULTIFOAM INOX

MADE BY



MULTIFOAM INOX is a low-pressure foaming nebulizer, used for multiple cleaning applications, in particular for: cleaning with foam detergents, cleaning with nebulization of traditional detergents and environmental hygiene with nebulization of sanitizers. The equipment is available in stainless steel 18/8 AISI 304.

| MODEL | TANK CAPACITY |
|----------------------|---------------|
| MULTIFOAM INOX 24 LT | 24 LT |
| MULTIFOAM INOX 50 LT | 50 LT |



CORE

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EASYFOAM

MADE BY



EASYFOAM is a patented system for the supply of foam detergents with compressed air. All models have a compact size but provide high performances and are ideal for cleaning vertical surfaces and ceilings. Thanks to the total absence of vaporization, they are suitable to be used in complete safety with very high alkalinity foam detergents.

EQUIPMENT

EASYFOAM MIX and EASYFOAM MIX WITH WHEELS enable to supply at the same time also an additive with sanitizing action.

EASYFOAM PRESSURE is a foaming system able to feed itself at the correct pressure regardless of the type of water network in the plant.

All EASYFOAM models are available:

- with connection pipe with a length of 15 or 20 metres;

- with wheels.

| MODEL | SUPPLIED PRODUCT/S |
|-------------------------|---------------------------|
| EASYFOAM P 15 MT | Foam detergent |
| EASYFOAM P 20 MT | Foam detergent |
| EASYFOAM MIX P 15 MT | Foam detergent + additive |
| EASYFOAM MIX P 20 MT | Foam detergent + additive |
| EASYFOAM PRESSURE 15 MT | Foam detergent |
| EASYFOAM PRESSURE 20 MT | Foam detergent |



LUBIMATIC CONTROL DRY

MADE BY

QUIPMENT



The LUBIMATIC CONTROL DRY range includes 2 models, each consisting of a central plant for the automatic supply of dry lubricants with programmable timed system. The control unit has to be coupled to dripless pneumatic lubrication nozzles, able to ensure the nebulization of the product on the entire surface of the conveyor belt. The system is able to handle up to 80 nozzles.

MANAGEABLE SYSTEMS

Small-sized system

Large-sized system

LUBIMATIC CONTROL DRY ECO LUBIMATIC CONTROL DRY 5 ZONES

DOSAPROP

MADE BY

MODEL

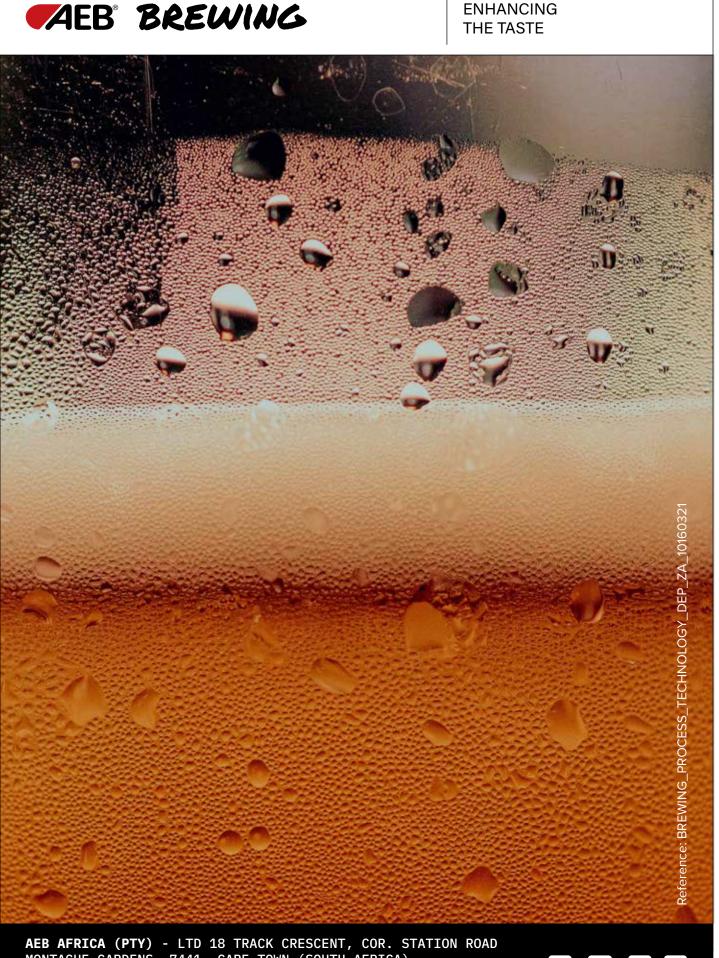


NEEDS

INDUSTRIAL & SPECIAL

Dosaprop is a doser ensuring additions of liquid products proportionally to the flow and it provides a perfect homogenization. Its operation is based on a sensor detecting the quantity of liquid flowing inside the pipe, by sending to the dosing system the impulse for the addition. The product quantity is easily manageable thanks to a micro-push button. Dosaprop is resizable to satisfy plants with hourly flow from 6 to 60 hL/h and from 100 to 1200 hL/hour. The dosage of agents can be supplied from a maximum of 3 pumps and is dimensioned from1 to 730 L/hour.





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