

# DISTILLER'S RANGE

GENUINE DISTILLING YEASTS, NUTRIENTS AND ENZYMES



## DISTILLER'S RANGE; EVERYTHING YOU NEED FOR HOME DISTILLING.

For those wanting to ferment with genuine yeast strains when making Whiskey, Rum, Vodka or Gin, look no further than the Distiller's Range for home distilling!

#### Distiller's Yeasts:

**Whiskey** - A specialist active dried Whiskey distiller's yeast producing an optimum congener profile for elegant, well-rounded and refined whiskey spirit for oak aging.

**Gin** - A particularly clean active dried yeast, especially selected for Gin production. This strain gives a neutral congener profile, making clean and crisp spirit alcohol perfect for showcasing your botanicals.

**Vodka** - A specialist active dried Vodka distiller's yeast with an extremely low congener profile for production of rounded vodka spirit with a clean authentic finish.

**Rum** - A specialist active dried Rum distiller's yeast. This strain produces an optimum congener profile for full-flavoured, smooth and rounded Rum spirit.

#### **Distiller's Nutrients:**

**Dark Spirits** - Yeast nutrient blend especially formulated for enhanced congener production during fermentation of alcohol for dark spirits.

**Light Spirits** - Yeast nutrient blend especially formulated for reduced off-flavour production during fermentation of alcohol for light/white spirits.

#### Distiller's Enzymes:

**Glucoamylase** - Glucoamylase is a fungal-derived enzyme which breaks down dextrins into simple sugars.

**Alpha-amylase** - Alpha-amylase is a bacterially-derived enzyme which breaks down starch into dextrins and simple sugars.

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## ARTISAN INGREDIENTS KITS

Each kit contains authentic ingredients and step-by-step instructions to guide you through the process of crafting your own Whiskey or Gin, similarly to how a craft distillery would.



#### Artisan Gin Ingredients Kit

All the ingredients you need to create your own London Dry Style Gin.

- Dextrose
- · Gin yeast & yeast nutrient
- Finings
- A botanical blend of juniper, coriander, liquorice root, and dried lemon and orange peel.

When used with a simple distillery set-up, you can craft distil a bright, crisp and refreshing London Dry style gin with notes of pine and citrus, and a warm pepperiness on the palate.



#### Artisan Whiskey Ingredients Kit

All the ingredients you need to create your own small-batch Whiskey.

- · Barley malt extract
- Dextrose
- Whiskey yeast & yeast nutrient
- Finings
- · Kentucky bourbon oak chips for ageing your spirit.

When used with a simple distillery set-up, you can craft distil an elegant, well-rounded, and refined whiskey spirit for oak-ageing.

## DISTILLER'S YEASTS

### UNIQUE YEAST STRAINS FOR CRAFT DISTILLING









## WHISKEY

A specialist active dried Whiskey distiller's yeast producing an optimum congener profile for elegant, well-rounded and refined whiskey spirit for oak aging.

#### **Application**

For fermentation of sugar, malt extract, or grain mash for distillation of Whiskey spirit using the T500 Boiler or Grainfather G30 Brewing System with the Pot Still Alembic Dome Top and Copper Condenser. For a result with less character, the T500 Stainless Steel Reflux Condenser or T500 Copper Reflux Condenser can be used, if the ceramic or stainless steel saddles are removed.

#### Information

**Net Weight:** 20 g (0.7 US oz)

Sufficient for: Up to 25 L (6.6 US Gal)

Alcohol Tolerance: 15% ABV Attenuation: 90-100% (High) Flocculation Rate: Medium

**Recommended Temperature Range:** 20-35°C (68-95°F) **Strain Classification:** *Saccharomyces cerevisiae* 

Viable Yeast Cells/g: >1 x 1010

**Dry Weight: 92-96%** 

Wild Yeast Cells/g: <1 per 10<sup>6</sup> cells Total Bacteria: <1 x 10<sup>5</sup> cfu/g GMO Status: GMO Free

Shelf Life: 24 Months

**Storage:** Store in a cool, dry place away from direct sunlight.

Place of Origin: Made in the UK from imported and local ingredients.

Packaging: Packaged in a protective atmosphere.

#### **Instructions**

Add directly to fermentation vessel and leave to ferment at 20-35°C (68-95°F) ambient air temperature for optimum performance and quality.

#### **Ingredients**

## GIN

A particularly clean active dried yeast, especially selected for Gin production. This strain gives a neutral congener profile, making clean and crisp spirit alcohol perfect for showcasing your botanicals.

#### **Application**

For fermentation of sugar, potato, or grain mash for distillation of Gin spirit using the T500 Boiler or Grainfather G30 Brewing System with either the T500 Stainless Steel Reflux Condenser or T500 Copper Reflux Condenser.

#### Information

**Net Weight:** 20 g (0.7 oz)

Sufficient for: Up to 25 L (6.6 US Gal)

Alcohol Tolerance: 18% ABV Attenuation: 70-100 % (Low-High)

Flocculation Rate: Low

Recommended Temperature Range: 12-32°C (54-90°F)

Strain Classification: Saccharomyces bayanus

Viable Yeast Cells/g: >1 x 1010

**Dry Weight: 92-96%** 

Wild Yeast Cells/g: <1 per 10<sup>6</sup> cells Total Bacteria: <1 x 10<sup>5</sup> cfu/g GMO Status: GMO Free

Shelf Life: 24 Months

Storage: Store in a cool, dry place away from direct sunlight.

**Place of Origin:** Made in the UK from imported and local ingredients.

Packaging: Packaged in a protective atmosphere.

#### **Instructions**

Add directly to fermentation vessel and leave to ferment at 12-32°C (54-90°F) ambient air temperature for optimum performance and quality.

#### **Ingredients**

## **VODKA**

A specialist active dried Vodka distiller's yeast with an extremely low congener profile for production of rounded vodka spirit with a clean authentic finish.

#### Application

For fermentation of sugar, potato or grain mash for distillation of Vodka spirit using the T500 Boiler or Grainfather G30 Brewing System (this system can NOT be used for mashing potatoes) with either the T500 Stainless Steel Reflux Condenser or T500 Copper Reflux Condenser.

#### Information

Net Weight: 20 g (0.7 US oz)

**Sufficient for:** Up to 25 L (6.6 US Gal)

Alcohol Tolerance: 18% ABV Attenuation: 80-100 % (High) Flocculation Rate: Low

Recommended Temperature Range: 20-32°C (68-90°F) Strain Classification: Saccharomyces cerevisiae

Viable Yeast Cells/g: >1 x 1010

**Dry Weight: 92-96%** 

Shelf Life: 24 Months

Wild Yeast Cells/g: <1 per 10<sup>6</sup> cells Total Bacteria: <1 x 10<sup>5</sup> cfu/g GMO Status: GMO Free

Storage: Store in a cool, dry place away from direct sunlight.

Place of Origin: Made in the UK from imported and local ingredients.

Packaging: Packaged in a protective atmosphere.

#### Instructions

Add directly to fermentation vessel and leave to ferment at 20-32°C (68-90°F) ambient air temperature for optimum performance and quality.

#### **Ingredients**

## RUM

A specialist active dried Rum distiller's yeast. This strain produces an optimum congener profile for full-flavoured, smooth and rounded Rum spirit.

**Application** 

For fermentation of sugar, treacle, molasses or sugar cane juice for distillation of Rum spirit using the T500 Boiler or Grainfather G30 Brewing System with the Pot Still Alembic Dome Top and Copper Condenser. For a result with less character, the T500 Stainless Steel Reflux Condenser or T500 Copper Reflux Condenser can be used, if the ceramic or stainless steel saddles are removed.

#### Information

Net Weight: 20 g (0.7 US oz)

Sufficient for: Up to 25 L (6.6 US Gal)

**Alcohol Tolerance:** 15% ABV **Attenuation:** 70-100% (Low-High)

Flocculation Rate: Medium

**Recommended Temperature Range:** 20-34°C (68-93°F) **Strain Classification:** *Saccharomyces cerevisiae* 

Viable Yeast Cells/g: >1 x 1010

**Dry Weight: 92-96%** 

Wild Yeast Cells/g: <1 per 10<sup>6</sup> cells Total Bacteria: <1 x 10<sup>5</sup> cfu/g

**GMO Status:** GMO Free **Shelf Life:** 24 Months

Storage: Store in a cool, dry place away from direct sunlight.

Place of Origin: Made in the UK from imported and local ingredients.

Packaging: Packaged in a protective atmosphere.

#### Instructions

Add directly to fermentation vessel and leave to ferment at 20-34°C (68-93°F) ambient air temperature for optimum performance and quality.

#### **Ingredients**

## DISTILLER'S NUTRIENTS

## COMPLETE YEAST NUTRIENT BLENDS FOR CRAFT DISTILLING





## DARK SPIRITS

## Yeast nutrient blend especially formulated for enhanced congener production during fermentation of alcohol for dark spirits.

**Application:** For fermentation of alcohol to make dark spirits (e.g. Whiskey, Brandy and Dark Rum) using the T500 Boiler or Grainfather G30 Brewing System with the Pot Still Alembic Dome Top and Copper Condenser. For a less refined result, the T500 Stainless Steel Reflux Condenser or T500 Copper Reflux Condenser can be used, if the ceramic or stainless steel saddles are removed.

#### Information

Formulated For: Dark Spirits Net Weight: 450 g (15.9 US oz)

Suggested Dosages Sufficient for: Up To 25 L (6.6 US Gal) | Dosage Amounts: Up To 9

	ABV	GRAMS (OZ US)	ML (US FL OZ)	Flat Measure Bottle Caps	TSP (Rounded)	US CUP (240 ml)
SUGAR WASH	Up To 15%	75 g (2.6 US oz)	70 ml (2.5 US fl oz)	4	13	1/3 Cup
FRUIT MASH	Up To 15%	50 g (1.8 US oz)	45 ml (1.5 US fl oz)	3	8	1/5 Cup
MOLASSES WASH	Up To 12%	50 g (1.8 US oz)	45 ml (1.5 US fl oz)	3	8	1/5 Cup
MALT EXTRACT OR GRAIN MASH	N/A	N/A	N/A	N/A	N/A	N/A

Total Nitrogen: ≥ 10.0% Heavy Metals (as Pb): < 10 ppm

Arsenic: < 2 ppm GMO Status: GMO free Shelf Life: 36 Months

**Storage:** Store in a cool, dry place away from

direct sunlight.

Place of Origin: Made in the UK from imported

and local ingredients.

**Safety:** Keep away from reach of children. **Warning:** Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes serious eye irritation. Causes skin irritation. Harmful to aquatic life.

**Prevention:** Wear eye protection. Wear protective gloves/protective clothing. Avoid

breathing dust. Use in a well-ventilated area. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

First Aid: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF SWALLOWED: Call a Poison centre or Doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before use. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Instructions:** Shake well before use. Add with yeast and stir well to dissolve, leave to ferment according to instructions specified for selected yeast strain.

Ingredients: Yeast nutrients, antifoaming agent, vitamins, trace minerals.

## LIGHT SPIRITS

#### Yeast nutrient blend especially formulated for reduced off-flavour production during fermentation of alcohol for light/white spirits.

Application: For fermentation of alcohol to make light/white spirits (e.g. Vodka, Gin, White Rum etc) using the T500 Boiler or Grainfather G30 Brewing System with either the T500 Stainless Steel Reflux Condenser or T500 Copper Reflux Condenser. If making White Rum, use the Pot Still Alembic Dome Top and Copper Condenser.

#### Information

Formulated For: Light/White Spirits Net Weight: 450 g (15.9 US oz)

Suggested Dosages Sufficient for: Up To 25 L (6.6 Us Gal) | Dosage Amounts: Up To 4.5

	ABV	GRAMS (OZ US)	ML (US FL OZ)	Flat Measure Bottle Caps	TSP (Rounded)	US CUP (240 ml)
SUGAR WASH	Up To 15%	150 g (5.3 oz)	190 ml (6.5 US fl oz)	11	25	4/5 Cup
РОТАТО	Up To 10%	100 g (3.5 oz)	130 ml (4.5 US fl oz)	7	17	1/2 Cup
MOLASSES WASH	Up To 12%	100 g (3.5 oz)	130 ml (4.5 US fl oz)	7	17	1/2 Cup
GRAIN MASH	N/A	N/A	N/A	N/A	N/A	N/A

Total Nitrogen: ≥ 6.0%

Heavy Metals (as Pb): < 10 ppm

Arsenic: < 2 ppm GMO Status: GMO free Shelf Life: 36 Months

Storage: Store in a cool, dry place away from

direct sunlight.

Place of Origin: Made in the UK from imported

and local ingredients.

Safety: Keep away from reach of children. Warning: Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes serious eve irritation.

Prevention: Wear eye protection. Wear protective gloves/ protective clothing. Avoid breathing dust. Use in a well-ventilated area. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. First Aid: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Call a Poison centre or doctor

if you feel unwell. Rinse mouth.

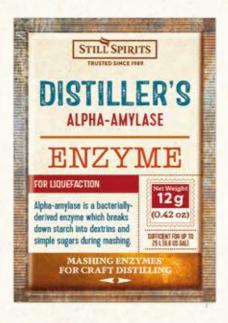
IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before use. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses. if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

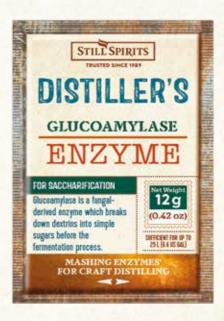
Instructions: Shake well before use. Add with yeast and stir well to dissolve, leave to ferment according to instructions specified for selected yeast strain.

**Ingredients:** Yeast nutrients, antifoaming agent, vitamins, trace minerals.

## DISTILLER'S ENZYMES

### MASHING ENZYMES FOR CRAFT DISTILLING





## **GLUCOAMYLASE**

Glucoamylase is a fungal-derived enzyme which breaks down dextrins into simple sugars.

#### **Application**

For use in mashing of starch-based substrates, such as raw grains and potato, for fermentation of alcohol to make distilled spirits. Can also be used for maximising yield when mashing malted grains using natural, diastatic enzyme activity.

#### Information

**Net Weight:** 12 g (0.42 US oz)

**Sufficient for:** Up to 10 kg (22 lbs) liquefied starch for

fermentation volumes up to 25 L (6.6 US Gal)

Enzyme Systematic Name: Glucan 1,4-Alpha-Glucosidase

Enzyme Activity(AGU/g): > 100,000

**Temperature Tolerance:** 30-65°C - Optimum 50-60°C (86-149°F - Optimum 122-140°F)

**pH Tolerance:** 2.8-5.0 (Optimum 4.0-4.5)

**GMO Status:** GMO free **Shelf Life:** 24 Months

**Storage:** Store in a cool, dry place away from direct sunlight. **Place of Origin:** Made in the UK from imported ingredients.

Danger: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### **Suggested Instructions**

Add enzyme to liquefied starch slurry or malted grain mash once at or below 65°C (149°F). Stir well, cover (or hold at 50-60°C (122-140°F)) and allow to stand for 1 hour before cooling for fermentation. Alternatively, add to mash/wort along with yeast and ferment at optimum 30-35°C (86-95°F) ambient air temperature (ensuring within tolerance for yeast) for simultaneous saccharification and fermentation.

#### **Ingredients**

Glucoamylase enzyme.

## ALPHA-AMYLASE

## Alpha-amylase is a bacterially-derived enzyme which breaks down starch into dextrins and simple sugars.

#### **Application**

For use in mashing of starch-based substrates, such as raw grains and potato, for fermentation of alcohol to make distilled spirits.

#### Information

**Net Weight:** 12 g (0.42 US oz)

**Sufficient for:** Up to 7.5 kg (16.5 lb) liquefied starch for fermentation volumes up to

25 L (6.6 US Gal)

Enzyme Systematic Name: 1,4-Alpha-D-Glucan Glucanohydrolase

Enzyme Activity (KNU-B/g): > 650

Temperature Tolerance: 65-80°C - Optimum 70-75°C (149-176 °F - Optimum 158-167°F)

**pH Tolerance:** 5.0-7.0 (Optimum 5.5-6.0)

Cation Requirements: 100-150 ppm Ca<sub>2+</sub> for optimum performance.

**GMO Status:** GMO free **Shelf Life:** 24 Months

**Storage:** Store in a cool, dry place away from direct sunlight. **Place of Origin:** Packed in the UK from imported ingredients.

Danger: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

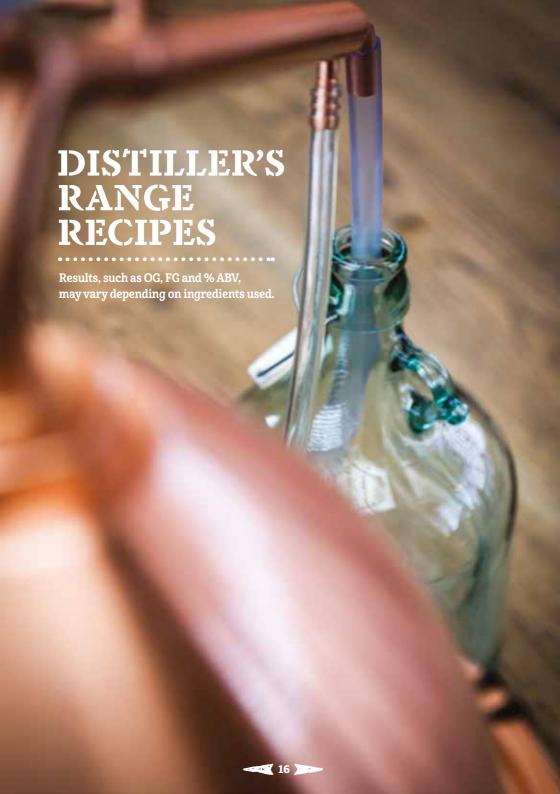
#### **Suggested Instructions**

Bring your starch substrate slurry to the boil and simmer for 30 minutes, then turn off the heat and allow to cool to 80°C (176°F) or just below. Add enzyme and stir well and then cover (or hold at 65-80°C (149-176°F)) and allow to stand for 60 minutes.

Please note that some starch substrates, such as corn starch and, may require longer boiling times in order to fully break down and gelatinize the starch prior to application of Alpha-amylase enzyme.

#### **Ingredients**

Sodium chloride, Alpha-amylase enzyme.



## **VODKA - POTATO WASH**

#### (Using 20 L (5.3 US Gal) 9-10% ABV Potato Wash)

- 20g Distiller's Yeast Vodka
- 12g Distiller's Enzyme Alpha-Amylase
- 12g Distiller's Enzyme Glucoamylase
- 80g (2.9 oz) Distiller's Nutrient Light Spirits
- 10 kg potatoes
- 2.5 kg Sugar (or 2.75 kg Dextrose)
- 1. Thoroughly clean your potatoes before dicing and placing in a large size pot for boiling (no need to peel). Add water to cover and boil for 15 minutes or until just soft enough to mash. (If you don't have a large enough pot, you can split the potatoes between two smaller pots, splitting enzyme additions between pots).
- 2. Once your potatoes are soft, turn off the heat and drain the water before mashing to achieve a smooth consistency. At this stage you should add more water and stir until you achieve a liquid consistency (but with a volume less than your final fermentation volume), then turn the heat back on.
- Bring your potato slurry to the boil and simmer for 30 minutes, stirring occasionally to avoid the mixture sticking, adding a little more water if necessary to retain the liquid consistency. After 30 minutes of simmering, turn off the heat and allow to cool to 80°C (176°F) or just below before proceeding to step 4.
- 4. Add your Distiller's Enzyme Alpha-amylase and stir well and then cover (or hold at 65-80°C (149-176°F)) and allow to stand for 60 minutes while the enzyme liquifies the starch. It is recommended to stir the slurry and check the temperature roughly every 10 minutes. (Note that at this stage the starch slurry is open to microbial contamination, so ensure your thermometer and stirring spoon are sterilised before coming into contact with the liquid).
- As soon as the temperature is below 65°C (149°F), add your Distiller's Enzyme Glucoamylase and stir to dissolve (using your sterilised spoon) before re-covering and standing for 60 minutes for the enzyme to saccharify the starch.
- 6. After 60 minutes, transfer your saccharified starch slurry to a clean and sterile vessel (minimum 25 L capacity) by pouring through a sieve or cheese cloth to remove the potato solids (it is important to do this, otherwise the solids will cause significant foaming issues during fermentation), then add your sugar and top up with water to 20 L (5.3 US Gal), achieving a temperature of 20-32°C (68-90°F).

- 7. Once ready for fermentation, take your Distiller's Nutrient Light Spirits and shake it well. For up to 10% ABV, measure out 80g (2.9 oz) or see the instructions on the label or the Distiller's Nutrient Light Spirits page in the Distiller's Range booklet for further measuring unit options.
- Take your Distiller's Yeast Vodka, and at the same time take the measured out Distiller's Nutrient Light Spirits, then add them both directly to the fermentation vessel, fit your lid and airlock (half filled with sterile/boiled water).
- **9.** Leave to ferment at 20-32°C (68-90°F) for optimum performance and quality.
- 10. Once the airlock stops bubbling and the specific gravity have been stable for two consecutive days, this indicates fermentation is complete. You should now leave your wash to stand for 1-2 days for any remaining solids and yeast to settle out.
- Once fermentation is complete, you are now ready to distil your wash to make spirit. To maximise yield, we recommend transferring directly into your still by pouring, leaving only the heaviest sediment behind. For best quality spirit we recommend using a reflux still such as the T500 Reflux Distillation System. (Note that use of a pot still such as T500 with The Alembic Pot Still Copper Dome and Condenser will yield lower quality alcohol, requiring triple distillation and resulting in very low yield). Please refer to the instruction manual for your distillation unit for detailed instructions on distilling your spirit.
- **12.** After distillation, you may wish to filter your spirit through a carbon filter to polish the spirit, for cleaner, smoother vodka. For this purpose we recommend the Still Spirits Filter Pro or EZ Filter system.

## MALT WHISKEY USING THE GRAINFATHER G30

#### (Using 23 L (6.1 US Gal) 8.5% ABV Barley Wash)

- 8kg English or Scottish 2-Row Pale Ale Malt
- · 20g Distiller's Yeast Whiskey
- · 12g Distiller's Enzyme Alpha-amylase
- · 12g Distiller's Enzyme Glucoamylase
- New 6-8 Litre Medium Toast Oak Barrel (or 100g Medium Toast Oak Chips)
- 1. Fill the boiler with 21.9 L (5.8 US Gal) of water and input a temperature of 65°C (149°F).
- 2. When the water reaches 65°C (149°F), slowly add the grain, stirring slowly as you do to avoid dry clumps. Set up the mash as per the Grainfather G30 instructions and add your Still Spirits Distiller's Enzyme Alpha-amylase to the mash. Mash for 60 minutes.
- **3.** After 60 minutes ramp the temperature up to 75°C (167°F) for the mash out. Continue to recirculate the wort at 75°C (167°F) for 10 minutes.
- 4. Sparge with 11 L (2.9 US Gal) of water. This water must be at 75°C (167°F).
- Set the Grainfather to boil. Once it reaches 100°C (212°F), boil for 30 minutes. Ensure you pat down the proteins at the start of the boil to avoid foaming over. Allow the wort to cool.
- 6. Once the temperature of the wort drops below 65°C (149°F), add the Still Spirits Distiller's Enzyme Glucoamylase and hold at 50-60°C (122-140°F) for 60 minutes for the enzyme to saccharify the starch. Alternatively you can cool the wort to 30-32°C (86-90°F), adding your enzyme directly to the fermenter along with the yeast, fermenting at an optimum ambient air temperature of 30-32°C (86-90°F) for simultaneous saccharification and fermentation.
- **7.** Give the wort a good stir and then cool it using the counter flow wort chiller as per the Grainfather instructions. Once the wort is in your fermenter and has cooled to below 35°C (95°F), pitch the yeast.

- **8.** Ferment at 20-35°C (68-95°F) ambient air temperature for optimum performance and quality.
- Once the airlock stops bubbling and the specific gravity have been stable for two consecutive days, this indicates fermentation is complete. You should now leave your wash to stand for 1-2 days for any remaining solids and yeast to settle out. Still Spirits Turbo Clear can be used here to speed up the clarification process.
- You are now ready to distil your wash to make whiskey. The wash should be siphoned into your still to leave behind the sediment. Please refer to the instruction manual of your distillation unit for detailed instructions on distilling your spirit.
- After distilling you will be left with a richly flavoured but white coloured spirit. For best results you should age your spirit on oak, either by filling into a 6-8 litre medium toast oak barrel (new, or used previously for whiskey), or by adding 100g medium toast oak chips to your spirit for a faster infusion. During ageing, you should taste your whiskey regularly until your desired level of oak flavour is achieved.



## **BOURBON - 51% UNMALTED CORN**

#### (Using 23 L (6.1 US Gal) 9.4% ABV 51% Unmalted Corn)

- 4.5kg Flaked Maize (or Corn Meal, or Cracked Corn)
- · 2.2kg Rye Malt
- · 2.2kg Distiller's Malt
- · 20g Distiller's Yeast Whiskey

- · 12g Distiller's Enzyme Alpha-amylase
- · 12g Distiller's Enzyme Glucoamylase
- 6-8 Liter Medium Toast Oak Barrel, new or used for Bourbon (or 100g Medium Toast Oak Chips)
- 1. Fill the boiler with 24 L (6.3 US Gal) of water and input a temperature of 65°C (149°F)
- When the water reaches 65°C (149°F), slowly add the grain and corn, stirring slowly as you do to avoid dry clumps. Set up the mash as per the Grainfather instructions and add your Still Spirits Distiller's Enzyme Alpha-Amylase to the mash.

  Mash for 60 minutes.
- **3.** After 60 minutes ramp the temperature up to 75°C (167°F) for the mash out. Continue to recirculate the wort at 75°C (167°F) for 10 minutes.
- Sparge with 9.7 L (2.6 US Gal) of water. This water must be at 75°C (167°F).
- 5. Set the Grainfather to boil. Once it reaches 100°C (212°F), boil for 30 minutes. Ensure to pat down the proteins at the start of the boil to avoid foaming over.
- Once the temperature of the wort drops below 65°C (149°F), add the Still Spirits Distiller's Enzyme Glucoamylase and hold at 50-60°C (122-140°F) for 60 minutes for the enzyme to saccharify the starch. (Alternatively you can cool the wort to 30-32°C (86-90°F), adding your enzyme directly to the fermenter along with the yeast, fermenting at an optimum ambient air temperature of 30-35°C (86-95°F) for simultaneous scarification and fermentation)
- **7.** Give the wort a good stir and then cool it using the counter flow wort chiller as per the Grainfather instructions. As the cool wort collects in your fermenter pitch the yeast.

- **8.** Ferment at 20-35°C (68-95°F) ambient air temperature for optimum performance and quality.
- Once the airlock stops bubbling and the specific gravity have been stable for two consecutive days, this indicates fermentation is complete. You should now leave your wash to stand for 1-2 days for any remaining solids and yeast to settle out. Still Spirits Turbo Clear can used here to speed up the clarification process.
- You are now ready to distil your wash to make bourbon style whiskey. The wash should be siphoned into your still to leave behind the sediment. Please refer to the instruction manual of your distillation unit for detailed instructions on distilling your spirit.
- After distilling you will be left with a richly flavoured but white coloured spirit. For best results you should age your bourbon style whiskey on oak, either by filling into a 6-8 litre medium toast oak barrel (new, or used previously for whiskey), or by adding 100g medium toast oak chips to your whiskey for a faster infusion. During ageing, you should taste your bourbon style whiskey regularly until your desired level of oak flavour is achieved



## DARK RUM - FROM MOLASSES

#### (Using 25 L (6.6 US Gal) 12% ABV Molasses)

- 9.5kg Black Strap Molasses
- · 20g Distiller's Yeast Rum
- 12g Distiller's Enzyme Glucoamylase (optional)
- 50g Distiller's Nutrient Dark Spirits
- 6-8 Liter Medium Toast Oak Barrel, new or used for rum (or 100g Medium Toast Oak Chips)

- 1. Half fill your clean and sterile fermentation vessel (30 L capacity) with water at approximately 50°C (104°F), then add in 9.5kg blackstrap molasses while stirring vigorously to dissolve. (Note that the solution will become very viscous, so if it becomes too difficult to stir you should add more hot water, providing the total volume does not exceed 25 L).
- 2. Once the molasses is fully dissolved, top up the solution to a final volume of 25 L (if required), aiming for a liquid temperature of 30-35°C (86-95°F).
- Take your Distiller's Nutrient Dark Spirits and shake it well. For up to 12% ABV, measure out 50 g (1.8 oz) or see the instructions on the label or the Distiller's Nutrient Dark Spirits page in the Distiller's Range booklet for further measuring unit options.
- Depending upon the sugar profile of your molasses, there may be a yield benefit in adding Distiller's Enzyme Glucoamylase during your fermentation, although any increase in yield will be offset by a reduction in the flavour quality of your rum. If you would like to try for a higher yield, you can add the Distiller's Enzyme Glucoamylase now along with your measured-out Distiller's Nutrient Dark Spirits, before stirring to dissolve thoroughly using your sterilised spoon.

<sup>\*</sup>note that OG, FG, and % ABV may vary depending upon the fermentability of your molasses

- Ensuring the temperature is below 35°C (95°F), take your Distiller's Yeast Rum and add directly to the fermentation vessel, fit your lid and airlock (half filled with sterile/boiled water) and leave to ferment at 20-34°C (68-93°F) ambient temperature for optimum performance and quality. (Note that warmer fermentation temperatures will yield fuller flavoured, fruitier rum spirit, whereas lower temperatures will yield a cleaner, lighter rum). If you chose to include Distiller's Enzyme Glucoamylase, best results will be achieved fermenting at 30-34°C (86-93°F).
- Leave your molasses wash to ferment at the appropriate temperature. Note that there may be some foaming at the liquids surface this is why a 30 L capacity vessel is recommended for a 25 L volume.
- Once your airlock stops bubbling, this indicates fermentation is complete. This should happen within 1-2 weeks, depending upon the fermentation temperature. if using a hydrometer, the gravity reading should have stabilised.
- Once fermentation is complete you should leave to stand for 2-3 days to allow the yeast and any other solids to settle out to the bottom of the vessel. Still Spirits Turbo Clear can be used here to speed up the clarification process.
- You are now ready to distil your wash to make spirit. The wash should be siphoned into your still to leave behind the sediment. For best quality rum we recommend using a pot still such as the T500 Bolier with Pot Still Alembic Dome Top with Condenser. (Note that use of a Column Still such as T500 Reflux Distillation System can be used, but the saddles should be removed from the column to prevent the reflux action from rectifying your rum into a cleaner spirit). Please refer to the instruction manual for your distillation unit for detailed instructions on distilling your spirit.
- 10. After distillation you will be left with a richly flavoured but white coloured spirit. For best results you should age your rum on oak, either by filling into a 6-8 litre medium toast oak barrel (new, or used previously for rum), or by adding 100g medium toast oak chips to your rum for a faster infusion. During ageing, you should taste your rum regularly until your desired level of oak flavour is achieved. If you wish, you can also add a spirit stable caramel colouring, to turn your golden coloured oak aged rum into a genuine-looking dark spirit.

## GIN - FROM SUGAR

#### (Using 25 L (6.6 US Gal) 14.4% ABV Pure Sugar)

- · 6kg Sugar (or 6.6kg Dextrose)
- · 20g Distiller's Yeast Gin
- · 150g Distiller's Nutrient Light Spirits
- 1. Add 21 L (5.5 US Gal) of water at approximately 30°C (86°F) to your clean fermenter.
- 2. Add 6 kg (13 lb) sucrose or 6.6 kg dextrose and stir to dissolve. You will now have approximately 25 L (6.6 US Gal) of sugar solution ready for fermentation.
- Take your Distiller's Nutrient Light Spirits and shake it well. For up to 15% ABV, measure out 150 g (5.3 oz) or see the instructions on the label or the Distiller's Nutrient Light Spirits page in the Distiller's Range booklet for further measuring unit options.
- Take your Distiller's Yeast Gin, and at the same time take the measured out Distiller's Nutrient Light Spirits, add them both directly to the fermentation vessel and stir well to dissolve, then fit your lid and airlock (half filled with sterile/boiled water).
- Leave to ferment at 20-32°C (68-90°F) ambient temperature for optimum performance and quality. If you wish (it is optional) you can also add Still Spirits Turbo Carbon to absorb impurities produced by the yeast during fermentation, improving the quality of your alcohol.
- Once your airlocks stops bubbling, this indicates fermentation is complete. This should happen within approximately 7 days, providing the temperature has been 20°C (68°F) or above throughout. If you taste the wash at this stage it should taste dry and not at all sweet, or if using a hydrometer the gravity reading should have stabilised.
- 7. You should now leave your wash to stand for 1-2 days for any remaining solids and yeast to settle out. Still Spirits Turbo Clear can be used here to speed up the clarification process.

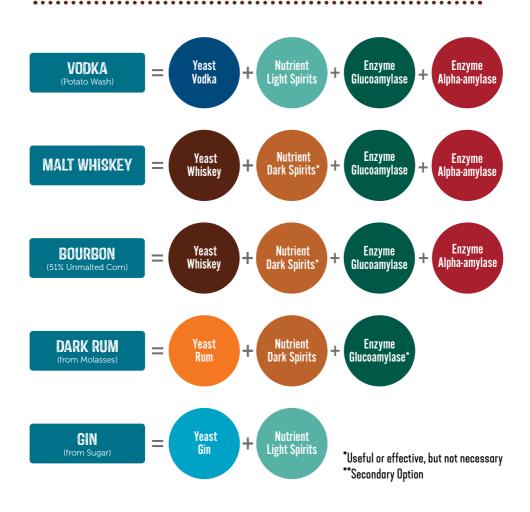
- You are now ready to distil your wash to make spirit. The wash should be siphoned into your still to leave behind the sediment. For best quality spirit we recommend using a column still such as the Turbo 500 with Condenser Column for your first distillation, followed by a second distillation with botanical infusion to flavour your spirit. (Note that use of a pot still such as Turbo 500 with the Pot Still Alembic Copper Dome and Condenser will yield lower quality alcohol, requiring double distillation and resulting in very low yield). Please refer to the instruction manual for your distillation unit for detailed instructions on distilling your spirit.
- 9. After your first distillation (or double distillation if using a pot still), you may wish to filter your spirit through a carbon filter to polish the spirit, for cleaner, smoother gin. For this purpose we recommend the Still Spirits Filter Pro or EZ Filter System.

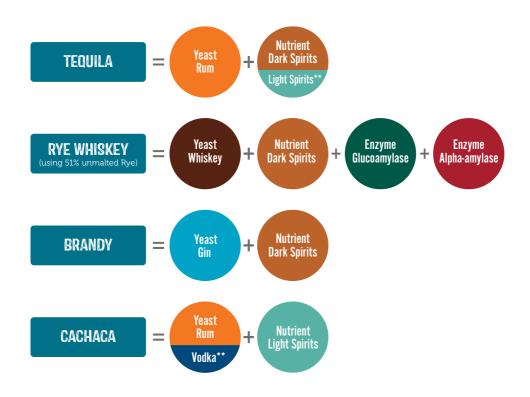
You are now ready for your botanical infusion distillation run. For this we recommend using a pot still such as T500 boiler with the Pot Still Alembic Dome Top and Condenser with the Still Spirits Botanicals Basket attachment, but alternatively the T500 Reflux Distillation System can be used with the saddles removed (also with the Botanicals Basket). For your botanicals, you can either use one of the Still Spirits Gin Botanical blends, or make your own blend based on your own custom recipe. Please refer to the instruction manuals for your distillation unit and botanicals basket for detailed instructions on distilling your spirit.



## DISTILLER'S RANGE VISUAL GUIDE

Let our easy to follow visual chart show you which Yeast, Nutrient and Enzyme you'll need for your desired result.





### UNIQUE YEAST STRAINS FOR CRAFT DISTILLING

<sup>\*</sup>Useful or effective, but not necessary

<sup>\*\*</sup>Secondary Option



Still Spirits Distiller's Range has been developed for those wanting to ferment with genuine yeast strains when making Whiskey, Rum, Vodka or Gin.

For more information on the full range of Still Spirits products and flavourings, visit our website:

www.stillspirits.com





