



DISTILLER'S RANGE

GENUINE DISTILLING YEASTS,
NUTRIENTS AND ENZYMES



FOR HOME CRAFT DISTILLING

YEASTS 20 G (0.7 US OZ)

NUTRIENTS 450 G (15.9 US OZ)

ENZYMES 12 G (0.4 US OZ)

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

CONTENTS

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 craft 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.

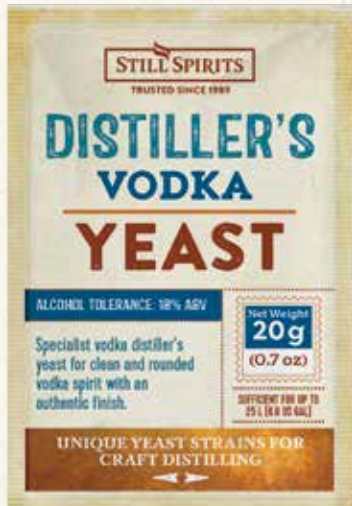
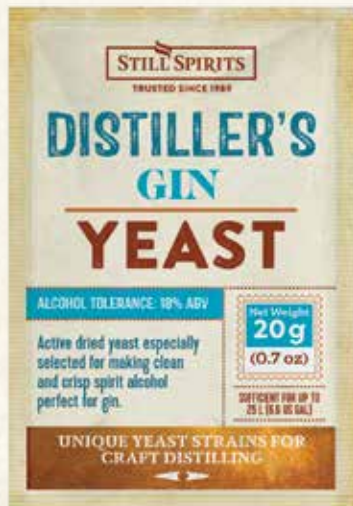
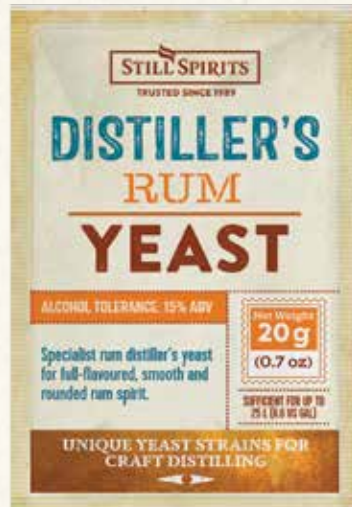
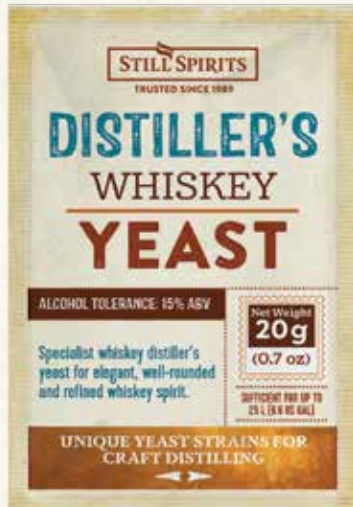
High Temperature Alpha-amylase - Alpha-amylase is a bacterially-derived enzyme which breaks down starch into dextrins and simple sugars.

| | |
|---|----------|
| Distiller's Yeast Whiskey | p. 4 |
| Distiller's Yeast Gin | p. 5 |
| Distiller's Yeast Vodka | p. 6 |
| Distiller's Yeast Rum | p. 7 |
| Distiller's Nutrient Dark Spirits | p. 9 |
| Distiller's Nutrient Light Spirits | p. 10 |
| Distiller's Enzyme Glucoamylase | p. 12 |
| Distiller's Enzyme High Temperature Alpha-amylase | p. 13 |
| Distiller's Range Recipes | p. 15-24 |
| Distiller's Range Visual Guide | p. 25-26 |

.....



UNIQUE YEAST STRAINS FOR CRAFT DISTILLING



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 Turbo 500 Boiler or Grainfather Brewing System with the Pot Still Alembic Dome Top and Copper Condenser. For a result with less character, the Turbo 500 Stainless Steel Condenser and Turbo 500 Copper Condenser can be used, if the ceramic saddles are removed, instead of using the Pot Still Alembic Dome Top and Copper Condenser.

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:** $>1 \times 10^{10}$
- Dry Weight:** 92-96%
- Wild Yeast Cells/g:** $<1 \text{ per } 10^6 \text{ cells}$
- Total Bacteria:** $<1 \times 10^5 \text{ cfu/g}$
- 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

Dried yeast (yeast, emulsifier [E491]).

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 Turbo 500 Boiler or Grainfather Brewing System with either the Turbo 500 Stainless Steel Condenser or Turbo 500 Copper 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: $>1 \times 10^{10}$

Dry Weight: 92-96%

Wild Yeast Cells/g: <1 per 10^6 cells

Total Bacteria: $<1 \times 10^5$ 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

Dried yeast (yeast, emulsifier [E491]).

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 Turbo 500 Boiler or Grainfather Brewing System (this system can NOT be used for mashing potato's) with either the Turbo 500 Stainless Steel Condenser or Turbo 500 Copper 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: $>1 \times 10^{10}$

Dry Weight: 92-96%

Wild Yeast Cells/g: <1 per 10^6 cells

Total Bacteria: $<1 \times 10^5$ 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 20-32°C (68-90°F) ambient air temperature for optimum performance and quality.

Ingredients

Dried yeast (yeast, emulsifier [E491]).

RUM

DISTILLER'S NUTRIENT'S

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 Turbo 500 Boiler or Grainfather Brewing System with the Pot Still Alembic Dome Top and Copper Condenser. For a result with less character, the Turbo 500 Stainless Steel Condenser and Turbo 500 Copper Condenser can be used, if the ceramic saddles are removed, instead of using the Pot Still Alembic Dome Top and Copper Condenser.

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: $>1 \times 10^{10}$

Dry Weight: 92-96%

Wild Yeast Cells/g: <1 per 10^6 cells

Total Bacteria: $<1 \times 10^5$ 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

Dried yeast (yeast, emulsifier [E491]).

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 liquor spirits (e.g. Whiskey, Brandy and Dark Rum) using the Turbo 500 Boiler or Grainfather Brewing System with the Pot Still Alembic Dome Top and Copper Condenser. For a less refined result, the Turbo 500 Stainless Steel Condenser and Turbo 500 Copper Condenser can be used, if the ceramic saddles are removed, instead of using the Pot Still Alembic Dome Top and Copper Condenser.

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 liquor spirits (e.g. Vodka, Gin, White Rum etc) using the Turbo 500 Boiler or Grainfather Brewing System with either the Turbo 500 Stainless Steel Condenser or Turbo 500 Copper 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 |
| POTATO | 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 eye 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.

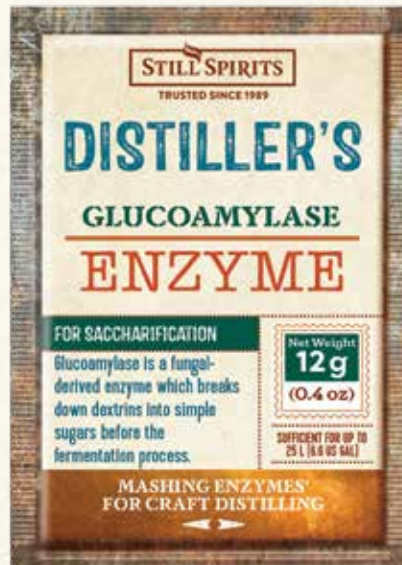
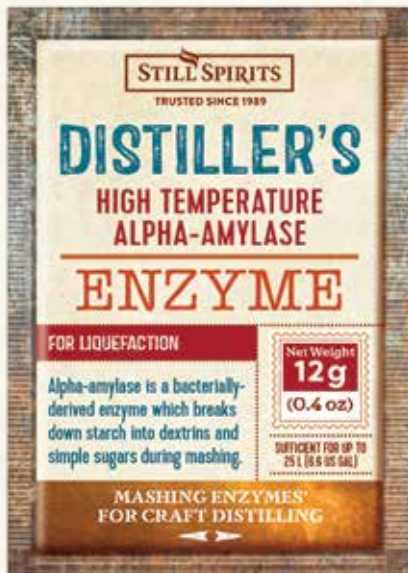
IF SWALLOWED: Call a Poison centre or doctor if you feel unwell. Rinse mouth.

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.

MASHING ENZYMES FOR CRAFT DISTILLING



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 (0.4 US oz)

Temperature: Standard Temperatures

Sufficient for: Up To 10 kg (22.0 lbs) Liquefied Starch For Fermentation Volumes Up To 25 L (6.6 US Gal)

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

Enzyme Activity (u/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 and local ingredients.

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

Instructions

Add enzyme to liquefied starch slurry or malted grain mash once 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.

HIGH TEMPERATURE 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 (0.4 US oz)

Temperature: High Temperatures

Sufficient for: Up to 10 kg (22.0 lbs) liquefied starch for fermentation volumes up to 25 L (6.6 US Gal)

Enzyme Systematic Name: 1,4-Alpha-D-Glucan Glucanohydrolase
Enzyme Activity (u/g): > 8,000

Temperature Tolerance: 80-110°C - Optimum 95-105°C
(176-230°F - Optimum 203-221°F)

pH Tolerance: 5.5-8.0 (Optimum 6.0-6.5)

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 and local ingredients.

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

Instructions

Add enzyme to starch substrate slurry, stir well and bring to the boil. Allow to simmer for 30 minutes then turn off the heat, cover (or hold at 85-95°C (185-203°F)) and allow to stand for 60 minutes.

Ingredients

Dextrose monohydrate, Alpha-amylase enzyme.

DISTILLER'S RANGE RECIPES

.....

Results, such as OG, FG and % ABV, may vary depending on ingredients used.

VODKA - POTATO WASH

(Using 25 L (6.6 US Gal) 9-10% ABV Potato Wash)

What you will need:

- **20g Distiller's Yeast - Vodka**
- **12g Distiller's Enzyme - High Temperature Alpha-Amylase**
- **12g Distiller's Enzyme - Glucoamylase**
- **100g Distiller's Nutrient - Light Spirits**
- **Turbo Clear (optional)**
- **20 kg potatoes (alternatively 10 kg potatoes and 2.5 kg granulated sugar)**

- 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.
- 3.** As your potato slurry is approaching the boil, add your Distiller's Enzyme - High Temperature Alpha-Amylase and stir well to dissolve. Once boiling, turn down the heat and simmer for 30 minutes, stirring occasionally to avoid the mixture sticking, adding a little more water if necessary to retain the liquid consistency.
- 4.** After 30 minutes of simmering, turn off the heat, cover, and leave to stand for an hour while the enzyme liquefies the starch, stirring and checking temperature 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).
- 5.** 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 saccharify the starch. Alternatively, you can cool to 30-32°C (86-90°F), adding your enzyme along with the yeast and nutrient, fermenting at optimum 30-32°C (86-90°F) ambient air temperature for simultaneous scarification and fermentation (in this case, skip point 6 and refer to points 7 and 8 for yeast and nutrient additions).

- 6.** After standing for 60 minutes, transfer your saccharified starch slurry to a clean and sterile fermentation vessel (30 L capacity), before adding your sugar (if applicable) and topping up with water to your final fermentation volume with 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 100 g (3.6 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.
- 8.** 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) and leave to ferment at 20-32°C (68-90°F) ambient temperature for optimum performance and quality - or if you opted for simultaneous saccharification and fermentation, ferment at optimum 30-32°C (86-90°F).
- 9.** Leave your wash to ferment at the appropriate temperature. Note that there will most likely be some foaming at the liquids surface - this is why a 30 L capacity vessel is recommended for a 25 L volume. During the first few days of fermentation, you may see a 'cap' of solids form on the liquid surface. If this happens, stir 1-2 times a day to mix back into the liquid.
- 10.** Once your airlocks stops bubbling, this indicates fermentation is complete. This should happen within 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.
- 11.** Once fermentation is complete, pour the wash into your second vessel through a sieve or cheese cloth to remove the solids (don't worry if some finer solids get through the sieve). 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.
- 12.** 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. (Note that use of a pot still such as Turbo 500 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.
- 13.** 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 EZ filter.

MALT WHISKEY

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

What you will need:

- **8kg - English or Scottish 2-Row Pale Ale Malt**
- **20g Distiller's Yeast - Whiskey**
- **12g Distiller's Enzyme - High Temperature 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 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).
- 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. 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 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.
- 9.** 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.
- 10.** 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.
- 11.** After distilling you will be left with a richly flavoured but white coloured spirit. For best results you should age your 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 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)

What you will need:

- 4.5kg - Flaked Maize (or Corn Meal, or Cracked Corn)
- 2.2kg - Rye Malt
- 2.2kg - Distillers 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)
2. 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.
4. 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.
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 30-35°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.
9. 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.
10. 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.
11. 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)

What you will need:

- **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)**

**note that OG, FG, and % ABV may vary depending upon the fermentability of your molasses*

- 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).
- 3.** 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.
- 4.** 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.

- 5.** 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).
- 6.** 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.
- 7.** 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.
- 8.** 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.
- 9.** 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 Turbo 500 with Pot Still Alembic Dome Top with Condenser. (Note that use of a Column Still such as Turbo 500 with Condenser Column 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)

What you will need:

- **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.
- 3.** 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.
- 4.** 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).
- 5.** 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.
- 6.** 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.

- 8.** 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.

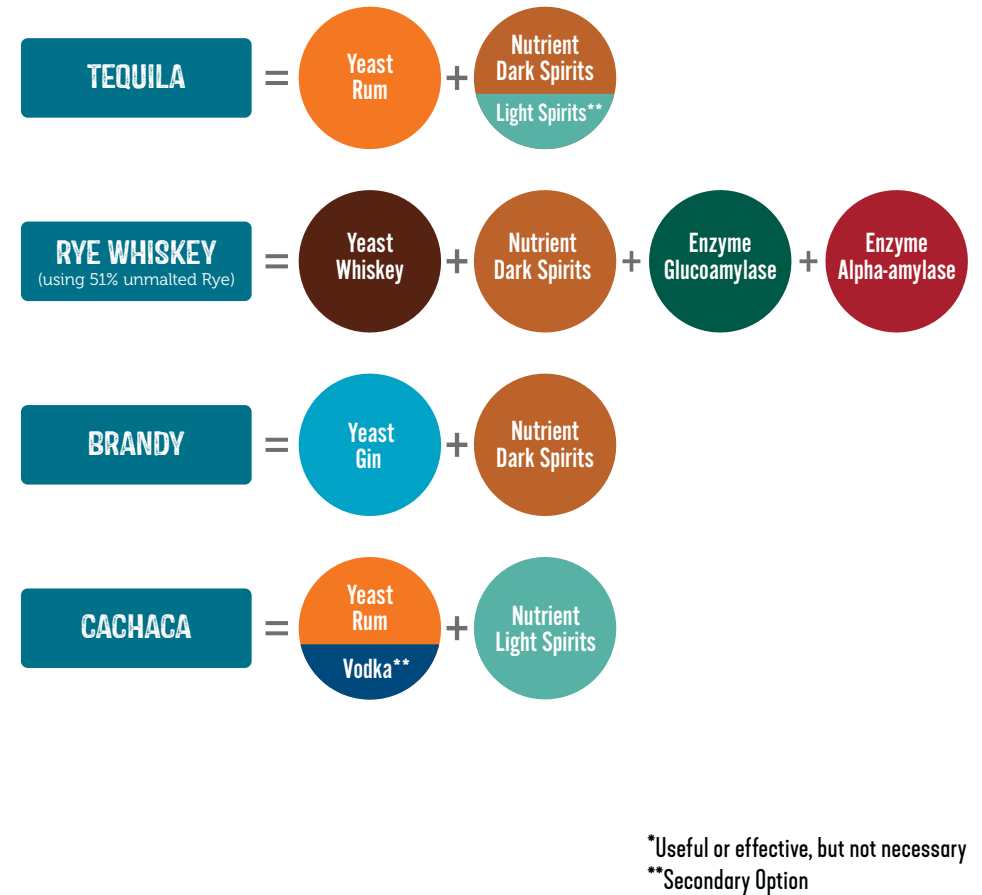
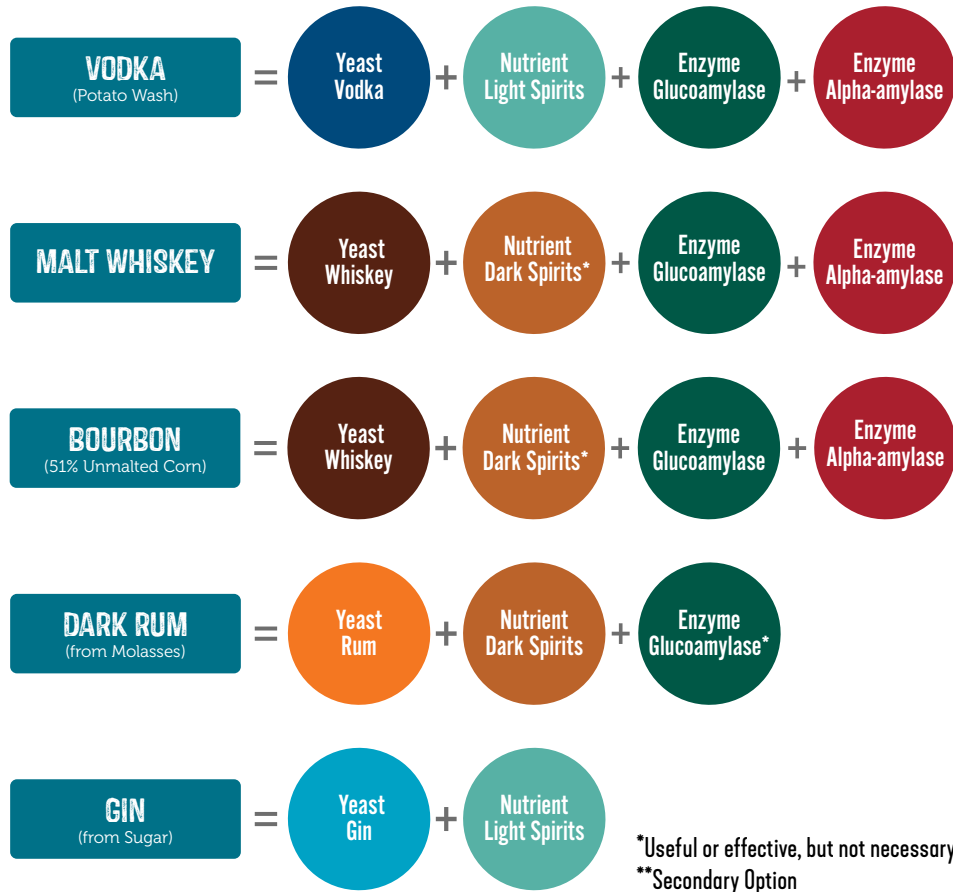
- 9.** After your first distillation (or double distillation if using a pot still), you may wish to filter your spirit through a carbon filter to polish the spirit, for cleaner, smoother gin. For this purpose we recommend the Still Spirits EZ filter.

You are now ready for your botanical infusion distillation run. For this we recommend using a pot still such as Turbo 500 with the Pot Still Alembic Dome Top and Condenser with the Still Spirits Botanicals Basket attachment, but alternatively the Turbo 500 with Condenser Column 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.





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

Reorder: 72577
Version: 1

