

# HHC HOMEBREW COMPETITION WINNING BEERS



## BREWER & COMPETITION DETAILS

<b>Brewer</b>	Nkululeko Mnisi	<b>Email (optional)</b>	<a href="mailto:mantjolo@yahoo.com">mantjolo@yahoo.com</a>
<b>Competition theme</b>	Tropical Stout		
<b>Competition date</b>	23 June 2022		

## BEER VITAL STATISTICS

<b>Style</b>	Tropical Stout				<b>BJCP nr</b>	16C
<b>Name (optional)</b>	-					
<b>Batch size (L)</b>	20					
<b>OG</b>	1.068	<b>FG</b>	1.020	<b>ABV</b>	6.4%	
<b>IBU</b>	38	<b>BU:GU</b>	0.588	<b>EBC</b>	70	

## WATER (ion concentrations in ppm)

<b>Source</b>	Picardie Spring Water		<b>Pre-treatment(s)</b>	None							
<b>Ca</b>	3	<b>Mg</b>	5	<b>Na</b>	35	<b>SO<sub>4</sub></b>	5	<b>Cl</b>	50	<b>HCO<sub>3</sub></b>	25

## FERMENTABLES

Nr	Name (Brand, Supplier)*	Amount (kg)	%
1	Pilsner (2 Row) Ger (3.9 EBC)	3.00	50.4
2	Munich Malt - 10L (19.7 EBC)	1.50	25.2
3	Oats, Flaked (2.0 EBC)	0.40	6.7
4	Carafa III (1034.2 EBC)	0.19	3.1
5	Chocolate Malt (689.5 EBC)	0.18	3.1
6	Roasted Barley (591.0 EBC)	0.18	3.1
7	Molasses [Boil] (157.6 EBC)	0.50	3.1
	<b>TOTAL</b>	<b>3.32</b>	<b>100</b>

**Notes:** Base malt: Malteurope. Speciality malt: Wayermann malts. Supplied by Let's Brew.

## MISCELLANEOUS ADDITIONS

Nr	Name	Amount (g)	Additional details
1	Chalk	5.10	Mash addition. Water adjustment
2	Epsom salt (MgSO <sub>4</sub> )	7.32	Mash addition. Water adjustment

3	Baking Soda	1.0	Mash addition. Water adjustment
4	Yeast nutrients	1 tsp	10 min Boil addition. Yeast nutrients.
5	Irish moss	1 tsp	10 min Boil addition. Clarity.

## HOPS

Nr	Name (Brand, Supplier)	Type / temp (°C) / time (min / days)	Amount (g)	IBUs
1	Chinook [13.00 %]	Boil 60 min	12.10	18
2	Chinook [13.00 %]	Boil 30 min	7	8
3	Chinook [13.00 %]	Boil 15 min	16.25	12
<b>TOTAL</b>			<b>35.35</b>	<b>38</b>

## MASHING

<b>System type</b>	Brew-in-a-basket		<b>Mashing/strike volume (L)</b>	27
<b>Mashing step 1</b>	<b>Time (min)</b>	90	<b>Temp (°C)</b>	66
<b>Mashing-out</b>	<b>Time (min)</b>	10	<b>Temp (°C)</b>	76
<b>Sparge volume (L)</b>			<b>Sparge temp (°C)</b>	

## BOILING & CHILLING

<b>Boil time (min)</b>	90	<b>Chill method</b>	Counter flow chiller.
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## YEAST & PITCHING

<b>Yeast (Brand, Supplier)</b>	Saflager Lager (Fermentis #W-34/70)	<b>Pitching type &amp; amount (g or ml)</b>	3L yeast starter
<b>Wort volume (L)</b>	20	<b>Pitching temp (°C)</b>	18

## FERMENTATION

<b>Fermenter type</b>	20L plastic bucket		<b>Temp control (yes/no)</b>		Yes
<b>Fermentation step 1</b>	<b>Time (days)</b>	7	<b>Temp (°C)</b>	18	<b>Pressure (psi)</b> n/a
<b>Fermentation step 2</b>	<b>Time (days)</b>	30	<b>Temp (°C)</b>	12	<b>Pressure (psi)</b>
<b>Cold crush</b>	<b>Finings</b>	1tsp	<b>Time (days)</b>	2	<b>Temp (°C)</b> 4

## PACKAGING & CARBONATION

<b>Packaging type</b>	Keg	<b>Vol CO<sub>2</sub></b>	2.3
<b>Storage temp (°C)</b>	3 °C	<b>Beer age at competition (days)</b>	46

## GENERAL COMMENTS & NOTES

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