

gónwo, normalnie gónwo

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **54**
- SRM **30**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **75C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale malt	4 kg (72.7%)	80 %	3
Grain	Munich Malt	1 kg (18.2%)	80 %	20
Grain	Roasted Barley	0.3 kg (5.5%)	55 %	1300
Grain	Chocolate Malt (UK)	0.2 kg (3.6%)	73 %	1067

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	60 g	60 min	9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's -M15 Empire Ale	Ale	Dry	10 g	Mangrove Jack's