

Dry stout gotowiec pp

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **29.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **25.3 liter(s)**

Steps

- Temp **55 C**, Time **1 min**
- Temp **72 C**, Time **10 min**
- Temp **67 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (65.2%)	80 %	5
Grain	Czekoladowy	0.3 kg (6.5%)	60 %	788
Grain	Monachijski	1 kg (21.7%)	80 %	16
Grain	Jęczmień palony	0.3 kg (6.5%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
S-04	Ale	Dry	1 g	Fermentum Mobile