

Dry stout

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **35.8**
- 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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.8 liter(s)**
- Total mash volume **22.9 liter(s)**

Steps

- Temp **55 C**, Time **0 min**
- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.8 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **0 min** at **55C**
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.6 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 (58.8%)	80 %	5
Grain	Monachijski	1 kg (19.6%)	80 %	16
Grain	Strzegom Czekoladowy 400	0.3 kg (5.9%)	68 %	400
Grain	Jęczmień palony	0.3 kg (5.9%)	55 %	985
Grain	Strzegom Karmel 600	0.5 kg (9.8%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	9.1 %
Boil	East Kent Goldings	30 g	10 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Pure Ale Yeast 7	Ale	Dry	10 g	---