

#4 Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **30**
- SRM **31**
- 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 **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **74.1C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (65.9%)	79 %	6
Grain	Strzegom Monachijski typ II	1 kg (22%)	79 %	22
Grain	Jęczmień palony	0.35 kg (7.7%)	70 %	985
Grain	Weyermann - Carafa II	0.2 kg (4.4%)	70 %	1100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	50 g	60 min	5.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5.5 g	Safale