

## #9 Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **21**
- SRM **35.4**
- 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 **4 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **27.2 liter(s)**

### Steps

- Temp **67 C**, Time **80 min**
- Temp **71 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.8 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **10 min** at **71C**
- Keep mash **10 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.75 kg (68.8%)	79 %	6.5
Grain	Monachijski typ II 20-25 EBC Weyermann	1 kg (18.3%)	80 %	22
Grain	Jęczmień palony	0.35 kg (6.4%)	55 %	985
Dodane na wygrzew				
Grain	Strzegom Czekoladowy ciemny	0.35 kg (6.4%)	68 %	1200
Dodane na wygrzew				

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	5.2 %
Boil	Fuggles	20 g	15 min	5.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis