

## dry stout 12 / z wysłodzin

---

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **33**
- SRM **40**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **31.2 liter(s)**

### Steps

- Temp **67 C**, Time **90 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **23.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (64.1%)	79 %	6
Grain	Strzegom Monachijski typ I	2 kg (25.6%)	79 %	16
Grain	Strzegom Czekoladowy ciemny	0.3 kg (3.8%)	68 %	1200
Grain	Jęczmień palony	0.5 kg (6.4%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	35 g	60 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	100 ml	Fermentum Mobile