

## #78 Dry Stout

- Gravity **10 BLG**
- ABV **4 %**
- IBU **30**
- SRM **33.7**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **7 liter(s)**
- Trub loss **4 %**
- Size with trub loss **7.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **9 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **5 liter(s)**
- Total mash volume **6.5 liter(s)**

### Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **2 min**

### Mash step by step

- Heat up **5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **2 min** at **77C**
- Sparge using **5.4 liter(s)** of **76C** water or to achieve **9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	1.1 kg (76.7%)	80 %	7
Grain	Płatki jęczmienne	0.15 kg (10.5%)	85 %	3
Grain	Strzegom Czekoladowy ciemny	0.1 kg (7%)	68 %	1200
Grain	Strzegom Barwiący	0.085 kg (5.9%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga PL	5 g	50 min	11 %
Aroma (end of boil)	East Kent Goldings	7 g	30 min	4.5 %
Aroma (end of boil)	East Kent Goldings	5 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	30 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	1.25 g	Boil	12 min