

## Irish stout +forest

---

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **25**
- SRM **31.1**
- Style **Dry Stout**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.6 kg (72%)	80 %	5
Grain	Weyermann - Melanoiden Malt	0.7 kg (14%)	81 %	53
Grain	Pszeniczny Czekoladowy wayerman	0.25 kg (5%)	73 %	1001
Grain	Jęczmień palony viking malt	0.25 kg (5%)	55 %	985
Grain	Viking Czekoladowy ciemny	0.2 kg (4%)	67 %	900

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	First Gold	35 g	60 min	5.6 %
Aroma (end of boil)	First Gold	15 g	10 min	5.6 %
Aroma (end of boil)	Fuggles	15 g	10 min	4.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lax whc	Ale	Slant	300 ml	Whc

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlflock	1 g	Boil	5 min
Water Agent	Kreda	6 g	Mash	60 min
Fining	Łuska ryżowa	100 g	Mash	5 min
Herb	pędy swierku	130 g	Boil	30 min