

## #075 Schwarzbier

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **25.8**
- Style **Schwarzbier**

### 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 **31.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **29.4 liter(s)**

### Steps

- Temp **63 C**, Time **55 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **23.5 liter(s)** of strike water to **68.4C**
- Add grains
- Keep mash **55 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.6 kg (78.4%)	82 %	4
Grain	Monachijski typ II 20-25 EBC Weyermann	0.4 kg (6.8%)	80 %	20
Grain	Abbey Malt Weyermann	0.3 kg (5.1%)	75 %	45
Grain	Weyermann - Carafa III	0.16 kg (2.7%)	70 %	1400
Grain	Carafa II	0.16 kg (2.7%)	70 %	1150
Grain	Fawcett - Pale Chocolate	0.25 kg (4.3%)	71 %	500

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	17 g	60 min	11 %
Boil	Hallertau Mittelfruh	30 g	20 min	3.8 %
Boil	Hallertau Mittelfruh	20 g	10 min	3.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	600 ml	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	whirfloc T	1.25 g	Boil	10 min
Other	pożywka dla drożdży	10 g	Boil	10 min