

Opalone wiesz ;)

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **23**
- SRM **5.6**
- Style **Classic Rauchbier**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **6 %/h**
- Boil size **59.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **49 liter(s)**
- Total mash volume **63 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **73 C**, Time **30 min**

Mash step by step

- Heat up **49 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **30 min** at **73C**
- Sparge using **24.9 liter(s)** of **76C** water or to achieve **59.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	8 kg (57.1%)	82 %	4
Grain	Briess - Smoked Malt	4 kg (28.6%)	80.5 %	10
Grain	Weyermann - Acidulated Malt	1 kg (7.1%)	80 %	6
Grain	Weyermann II	1 kg (7.1%)	80 %	25

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	13.5 %
Boil	Magnum	15 g	30 min	13.5 %
Aroma (end of boil)	Magnum	10 g	0 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	200 ml	FM

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	2 g	Boil	15 min