

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **29**
- SRM **3.5**
- Style **Other Smoked Beer**

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 **8 %/h**
- Boil size **29.3 liter(s)**

Mash information

- Mash efficiency **94 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **51 C**, Time **15 min**
- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **60 min** at **67C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Smoked Malt	4 kg (100%)	81 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Agnus	15 g	60 min	13.87 %
Boil	Tomyski	15 g	25 min	4 %
Boil	Tomyski	15 g	15 min	4 %
Boil	Tomyski	20 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	500 ml	Fermentum Mobile