

Sabro Pale Ale

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **39**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **16.5 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **13.2 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	3 kg (90.9%)	83 %	6
Grain	Carahell	0.3 kg (9.1%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sabro	6 g	60 min	15 %
Aroma (end of boil)	Sabro	30 g	10 min	15 %
Dry Hop	Sabro	64 g	3 day(s)	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
Stranda Kveik	Ale	Liquid	15 ml	White Labs