

MarcoweHallertauBlanc

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **27**
- SRM **6.6**
- Style **Oktoberfest/Märzen**

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 **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **53 C**, Time **15 min**
- Temp **64 C**, Time **40 min**
- Temp **73 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **15 min** at **53C**
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **73C**
- Keep mash **0 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (33.3%)	82 %	4
Grain	Viking Vienna Malt	2 kg (33.3%)	79 %	7
Grain	Viking Monachiski II	1 kg (16.7%)	80 %	20
Grain	Viking Karmel czerwony	0.5 kg (8.3%)	75 %	50
Grain	Płatki owsiane	0.5 kg (8.3%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Blanc	20 g	60 min	11 %
Boil	Hallertau Blanc	20 g	10 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	1000 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	Wirflock	5 g	Boil	10 min
Water Agent	Chlorek wapnia 33 %	20 g	Mash	60 min