

#2.20/ American Pale Ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **59**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **0 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Slod Pilznenski Viking Malt	3.5 kg (74.5%)	80.06 %	4
Grain	Slod Wiedenski Weyermann	1 kg (21.3%)	77.9 %	5
Grain	Karmelowy 30 Viking Malt	0.2 kg (4.3%)	74.65 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	30 g	60 min	12 %
Boil	Citra	15 g	30 min	12 %
Boil	Citra	10 g	5 min	12 %
Whirlpool	Amarillo	10 g	10 min	9 %
Dry Hop	Centennial	15 g	4 day(s)	10.5 %
Dry Hop	Cascade	50 g	4 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52	Ale	Liquid	120 ml	---