

American Pale Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **40**
- SRM **8.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.5 kg (41.7%)	85 %	7
Grain	Weyermann Monachijski typ I	2.5 kg (41.7%)	79 %	15
Grain	Caramunich® typ I	0.5 kg (8.3%)	73 %	80
Grain	Pszeniczny	0.5 kg (8.3%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	30 min	13.2 %
Boil	Cascade	15 g	20 min	6 %
Boil	Citra	10 g	10 min	12 %
Boil	Crystal	10 g	10 min	4.5 %
Boil	Citra	5 g	5 min	12 %
Boil	Crystal	5 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis