

American Amber Ale z PK

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **45**
- SRM **9.7**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.8 kg (77.6%)	80 %	5
Grain	Strzegom Monachijski typ I	0.45 kg (9.2%)	79 %	16
Grain	Caramunich® typ I	0.25 kg (5.1%)	73 %	80
Grain	Carared	0.25 kg (5.1%)	75 %	39
Grain	Caraaroma	0.15 kg (3.1%)	78 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Aroma (end of boil)	wakatu	50 g	10 min	8.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis