

American Pale Ale

- Gravity **11.9 BLG**
- ABV ---
- IBU **35**
- SRM **5.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **2500 liter(s)**
- Trub loss **5 %**
- Size with trub loss **2625 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **3162.5 liter(s)**

Mash information

- Mash efficiency **97.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **1260.3 liter(s)**
- Total mash volume **1680.4 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **1260.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **2322.3 liter(s)** of **76C** water or to achieve **3162.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	312.8 kg (74.5%)	80 %	7
Grain	Strzegom Wiedeński	89.4 kg (21.3%)	80.5 %	10
Grain	Karmelowy Czerwony	17.9 kg (4.3%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	1500 g	60 min	15.5 %
Boil	Cascade	1790 g	30 min	7.7 %
Boil	Cascade	1190 g	5 min	7.7 %
Boil	Amarillo	1190 g	0 min	9.5 %
Dry Hop	Cascade	1190 g	5 day(s)	7.7 %
Dry Hop	Amarillo	1190 g	5 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	1500 g	Fermentis