

Oriental American Pale Ale

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **33**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 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 **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (84.7%)	80 %	4
Grain	Castlemalting - Cara Clair	0.2 kg (3.4%)	78 %	4
Grain	Oats, Flaked	0.4 kg (6.8%)	80 %	2
Grain	Abbey Malt Weyermann	0.3 kg (5.1%)	75 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Denali	10 g	20 min	14 %
Boil	Denalu	10 g	10 min	14 %
Boil	Denali	30 g	5 min	14 %
Whirlpool	Denali	50 g	10 min	14 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	40 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra indyjska	25 g	Boil	10 min
Spice	Kardamon zielony	5 g	Boil	10 min
Spice	Liście limonki kaffir	15 g	Boil	15 min