

APA neum Warka #6

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **95**
- SRM **3.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **4 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.75 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19 liter(s)**

Steps

- Temp **68 C**, Time **30 min**
- Temp **73 C**, Time **30 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **74.4C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **73C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **29.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	PALE ALE/PILS 4,5EBC BYDGOSZCZ	4 kg (100%)	80 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum goryczka PL	15 g	60 min	13.5 %
Boil	Marynka 10% goryczka PL	10 g	60 min	10 %
Boil	lunga 12.5% goryczka PL	30 g	30 min	12.5 %
Boil	Magnum goryczka PL	15 g	30 min	13.5 %
Boil	Hallertauer Tradition 5% niemcy	30 g	30 min	5 %
Aroma (end of boil)	Hallertauer Tradition 5% niemcy	20 g	10 min	5 %
Dry Hop	Hallertauer Tradition 5% niemcy	25 g	7 day(s)	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-33	Ale	Dry	11.5 g	fermentis
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