

# apa z dodatkami [bitwy piwne 2021]

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **61**
- SRM **4.2**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **16.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3.2 kg (91.4%)	82 %	4
Grain	Strzegom Wiedeński	0.3 kg (8.6%)	79 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	30 min	9 %
Whirlpool	Nelson Sauvín	50 g	20 min	11 %
Dry Hop	Citra	50 g	3 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Us-05	Ale	Dry	11 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	trawa cytrynowa	3 g	Boil	5 min
Spice	kafir	3 g	Boil	5 min
Spice	skórka limonki	3 g	Boil	5 min
Spice	herbatka z trawy cytrynowej i kafiru	200 g	Bottling	---

herbatka z 5g kafiru i 10g trawy cytrynowej (świeża mrożona) zrobiona w 200ml wody, gotowana ok 5min i odcedzona