

## ZAPA2

- Gravity **13.3 BLG**
- ABV ---
- IBU **33**
- SRM **81.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Liquid Extract	ekstrakt słodowy ciemny Bruntal	4 kg (100%)	80 %	621

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	5 g	55 min	13.6 %
Boil	Magnat	5 g	30 min	13.6 %
Boil	Summit	10 g	20 min	14.3 %
Boil	Centennial	10 g	10 min	9.7 %
Boil	summit	10 g	10 min	14.3 %
Whirlpool	Centennial	10 g	5 min	9.7 %
Boil	magnat	5 g	5 min	13.6 %
Aroma (end of boil)	Summit	10 g	-1 min	14.3 %
Aroma (end of boil)	Centennial	10 g	-1 min	9.7 %
Aroma (end of boil)	Centennial	20 g	-5 min	10.5 %
Aroma (end of boil)	Summit	20 g	-5 min	14.3 %
Dry Hop	Centennial	50 g	7 day(s)	9.7 %
Dry Hop	Summit	30 g	7 day(s)	14.3 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11 g	nie wiem