

APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **21**
- SRM **6.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	8 kg (80%)	80 %	5
Grain	Karmelowy Jasny 30EBC	2 kg (20%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	30 g	60 min	10 %
Boil	Willamette	20 g	10 min	5 %
Boil	Willamette	30 g	5 min	5 %
Aroma (end of boil)	Willamette	50 g	1 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	22 g	---