

aaa

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **86**
- SRM **10.1**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **43 liter(s)**
- Trub loss **5 %**
- Size with trub loss **45.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **54.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.6 liter(s)**
- Total mash volume **36.8 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (72.1%)	80 %	5
Grain	Pszeniczny	1.71 kg (17.6%)	85 %	4
Grain	Caraaroma	0.5 kg (5.1%)	78 %	400
Adjunct	płatki	0.5 kg (5.1%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	66 g	60 min	15.5 %
Boil	Lublin (Lubelski)	40 g	15 min	4 %
Boil	Citra	50 g	10 min	12 %
Aroma (end of boil)	Citra	50 g	20 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	---