

APA

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **41**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **27.3 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (90.9%)	80 %	5
Grain	Pszeniczny	0.5 kg (9.1%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	50 min	15.5 %
Boil	Columbus/Tomahawk/Zeus	5 g	30 min	15.5 %
Aroma (end of boil)	Citra	5 g	15 min	12 %
Aroma (end of boil)	Simcoe	5 g	15 min	13.2 %
Aroma (end of boil)	Cascade	5 g	15 min	7.1 %
Aroma (end of boil)	Citra	10 g	10 min	12 %
Aroma (end of boil)	Simcoe	10 g	10 min	13.2 %
Aroma (end of boil)	Cascade	10 g	10 min	7.1 %
Aroma (end of boil)	Citra	10 g	5 min	12 %
Aroma (end of boil)	Simcoe	10 g	5 min	13.2 %
Aroma (end of boil)	Cascade	10 g	5 min	7.1 %
Whirlpool	Citra	5 g	0 min	12 %
Whirlpool	Simcoe	20 g	0 min	13.2 %
Whirlpool	Cascade	10 g	0 min	7.1 %
Dry Hop	Citra	20 g	5 day(s)	12 %
Dry Hop	Simcoe	5 g	5 day(s)	13.2 %
Dry Hop	Cascade	15 g	5 day(s)	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis