

ZestAPA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **43**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (87.5%)	80 %	5
Grain	Carahell	0.5 kg (12.5%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	5 g	60 min	11 %
Boil	lunga	5 g	50 min	11 %
Boil	lunga	5 g	40 min	11 %
Aroma (end of boil)	Citra	15 g	10 min	12 %
Aroma (end of boil)	Cascade	15 g	10 min	6 %
Aroma (end of boil)	Amarillo	15 g	10 min	9.5 %
Dry Hop	Citra	35 g	14 day(s)	12 %
Dry Hop	Cascade	35 g	14 day(s)	6 %
Dry Hop	Amarillo	35 g	14 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	12 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	zest cytryny	100 g	Secondary	14 day(s)
Flavor	zest grejfruta	100 g	Secondary	14 day(s)
Flavor	zest pomarańczy	100 g	Secondary	14 day(s)
Flavor	zest mandarynki	100 g	Secondary	14 day(s)