

APA Centennial Amarillo

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **44**
- SRM **7.3**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **75C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (91.7%)	80 %	5
Grain	Weyermann - Carapils	0.25 kg (4.2%)	78 %	4
Grain	Strzegom Karmel 150	0.25 kg (4.2%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	19 g	60 min	10.5 %
Boil	Amarillo	20 g	10 min	9.5 %
Boil	Centennial	20 g	10 min	10.5 %
Boil	Amarillo	20 g	5 min	9.5 %
Boil	Centennial	20 g	5 min	10.5 %
Aroma (end of boil)	Amarillo Hop Stand 15m	30 g	0 min	9.5 %
Aroma (end of boil)	Centennial Hop Stand 15m	30 g	0 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

us 05	Ale	Dry	11.5 g	Fermentis
-------	-----	-----	--------	-----------