

# SMAsH AMARILLO APA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **3.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **3 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **3 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (100%)	82 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	50 g	15 min	9.5 %
Boil	Amarillo	50 g	5 min	9.5 %
Boil	Amarillo	50 g	0 min	9.5 %
Dry Hop	Amarillo	50 g	2 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	120 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	Wirflfloc	2 g	Boil	10 min
Water Agent	Sól Epsom	1 g	Mash	60 min
Water Agent	Gips Piwowarski	4 g	Mash	60 min