

# ABPA

- Gravity **11.9 BLG**
- ABV ---
- IBU **24**
- SRM **8.2**
- Style **Belgian Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **28.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2 kg (37%)	80 %	7
Grain	Pilzneński	1.6 kg (29.6%)	81 %	4
Grain	Monachijski	1 kg (18.5%)	80 %	16
Grain	Biscuit Malt	0.41 kg (7.6%)	79 %	50
Grain	Aromatic Malt	0.25 kg (4.6%)	78 %	51
Grain	Weyermann - Caramunich	0.15 kg (2.8%)	76 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	El Dorado	20 g	15 min	15 %
Boil	El Dorado	30 g	5 min	15 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Belgian Ardennes	Ale	Liquid	125 ml	Wyeast Labs

## Extras

Type	Name	Amount	Use for	Time
Spice	skórka pomarańczy	2 g	Boil	5 min

## Notes

- zmienić/sprawdzić słody- dodać monachijski?? ..  
zmienić chmielenie..  
skórki z 2 pomarańczy i z połowy grejfruta...  
*Apr 13, 2017, 1:10 AM*