

# White Pale Ale

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **82**
- SRM **5.2**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 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 kg (98%)	80 %	5
Adjunct	Karmelowy Pszeniczny Strzegom	0.1 kg (2%)	79 %	130

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	55 g	60 min	13.5 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	10 min	4 %
Dry Hop	Lublin (Lubelski)	30 g	7 day(s)	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	400 ml	Safale do witbiera

## Extras

Type	Name	Amount	Use for	Time
Spice	Suszona skórka pomarańczy	20 g	Boil	10 min

Spice	Suszona skórka cytryny	20 g	Boil	10 min
Spice	Suszona skórka curacao	25 g	Boil	10 min
Spice	Suszona trawa cytrynowa	11 g	Boil	10 min
Spice	Nasiona kolendry indyjskiej	35 g	Boil	10 min
Spice	Imbir suszony (kostka)	25 g	Boil	10 min