

# Biały Zgorzkniały

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **75**
- SRM **4.3**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **9 %/h**
- Boil size **51.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36 liter(s)**
- Total mash volume **48 liter(s)**

## Steps

- Temp **63 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **36 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **76C**
- Sparge using **27.9 liter(s)** of **76C** water or to achieve **51.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (41.7%)	85 %	5
Grain	Pszeniczny	6 kg (50%)	85 %	4
Grain	Strzegom Pilznieński	1 kg (8.3%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Azacca	60 g	60 min	14 %
Boil	Azacca	40 g	30 min	14 %
Aroma (end of boil)	Mosaic	40 g	10 min	12 %
Aroma (end of boil)	Centennial	40 g	5 min	10.5 %
Aroma (end of boil)	Mosaic	40 g	2 min	10 %
Whirlpool	Centennial	40 g	0 min	10.5 %
Dry Hop	Mosaic	70 g	7 day(s)	10 %
Dry Hop	Centennial	20 g	7 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis