

# Białas

- Gravity **15.9 BLG**
- ABV ---
- IBU **61**
- SRM **4.2**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **18.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.6 kg (41.9%)	81 %	4
Grain	Pszeniczny	2.6 kg (41.9%)	85 %	4
Grain	Płatki pszeniczne	1 kg (16.1%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	25 g	60 min	15.5 %
Boil	Centennial	15 g	15 min	10.5 %
Boil	Vic Secret	15 g	15 min	16.1 %
Boil	Centennial	10 g	5 min	10.5 %
Boil	Vic Secret	10 g	5 min	16.1 %
Dry Hop	Vic Secret	25 g	6 day(s)	16.1 %
Dry Hop	Centennial	25 g	6 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Wheat	Slant	200 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	Kolendra	10 g	Boil	5 min
Flavor	Skórka Pomarańczowa	30 g	Boil	5 min
Flavor	Trawa Cytrynowa	20 g	Boil	10 min

## Notes

- Warka podzielona na 2 części:  
Jedna Vic secret na zimno  
Druga Centenial  
*Mar 1, 2017, 6:45 PM*