

## biała siła

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **16**
- SRM **2.9**
- Style **Witbier**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time --- **min**
- Evaporation rate **15 %/h**
- Boil size --- **liter(s)**

### Mash information

- Mash efficiency **45 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **5.1 liter(s)**
- Total mash volume **6.5 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **5.1 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **1 min** at **76C**
- Sparge using **-3.7 liter(s)** of **76C** water

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.35 kg (48.2%)	81 %	4
Adjunct	Pszenica niesłodowana	1.35 kg (48.2%)	75 %	3
Grain	Acid Malt	0.1 kg (3.6%)	58.7 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	halertau mittelfruh	20 g	60 min	4.1 %
Aroma (end of boil)	halertau mittelfruh	15 g	5 min	4.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM20 Białe Walonki	Ale	Liquid	300 ml	---

### Extras

Type	Name	Amount	Use for	Time
Spice	curacao	24 g	Boil	10 min
Spice	kolendra	12 g	Boil	10 min
Other	łuska ryżowa	50 g	Mash	---