

# Biały zBi(e)r

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **10**
- SRM **9**
- Style **Weizen/Weissbier**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **8.6 liter(s)**
- Total mash volume **11.2 liter(s)**

## Steps

- Temp **44 C**, Time **20 min**
- Temp **63 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **8.6 liter(s)** of strike water to **47.6C**
- Add grains
- Keep mash **20 min** at **44C**
- Keep mash **45 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	1 kg (38.5%)	80.5 %	2
Grain	Briess - Wheat Malt, White	1.3 kg (50%)	85 %	5
Grain	Munich Malt	0.1 kg (3.8%)	80 %	18
Grain	WES ekstrakt słodowy jasny	0.2 kg (7.7%)	80 %	256

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hersbrucker	13 g	60 min	4.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mauribrew Weiss Y1433	Wheat	Dry	12.5 g	Mauribrew