

# Biel

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **41**
- SRM **5.3**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

## Steps

- Temp **66 C**, Time **70 min**

## Mash step by step

- Heat up **10.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2 kg (55.6%)	81 %	4
Grain	Pszeniczny	1.4 kg (38.9%)	85 %	4
Grain	Viking melanoidynowy	0.1 kg (2.8%)	75 %	60
Grain	Weyermann - Acidulated Malt	0.1 kg (2.8%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	20 g	60 min	11 %
Whirlpool	lunga	10 g	0 min	11 %
Dry Hop	Oktawia	30 g	1 day(s)	7.1 %