

# Dobra piwunia

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **36**
- SRM **5.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2 kg (38.5%)	80 %	7
Grain	Pszeniczny	1 kg (19.2%)	85 %	4
Grain	Płatki owsiane	1.5 kg (28.8%)	85 %	3
Grain	Strzegom Bursztynowy	0.5 kg (9.6%)	70 %	49
Adjunct	Rice Hulls	0.2 kg (3.8%)	1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sorachi Ace	25 g	20 min	10 %
Boil	Citra	25 g	20 min	12 %
Whirlpool	Cascade	150 g	20 min	6 %
Whirlpool	Sorachi Ace	25 g	20 min	10 %
Whirlpool	Citra	25 g	20 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	150 ml	Fermentum Mobile