

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 |