

proste ale

- Gravity **11 BLG**
- ABV ---
- IBU **38**
- SRM **3.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **29.3 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Słód pilznieński Malteurop | 4 kg (89.9%) | 80 % | 5 |
| Sugar | cukier | 0.25 kg (5.6%) | 100 % | 0 |
| Grain | płatki jęczmienne | 0.2 kg (4.5%) | 65 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|----------|------------|
| First Wort | lunga | 20 g | 60 min | 9.5 % |
| Boil | Citra | 25 g | 7 min | 13.3 % |
| Boil | sabro | 20 g | 7 min | 15.5 % |
| Aroma (end of boil) | Citra | 25 g | 0 min | 13.3 % |
| Aroma (end of boil) | sabro | 20 g | 0 min | 15.5 % |
| Dry Hop | sabro | 30 g | 3 day(s) | 15.5 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------------|------|--------|---------|------------|
| WLP090 - San Diego Super Yeast | Ale | Liquid | 1500 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|---------|--------|
| Fining | Whirlfloc T | 1 g | Boil | 10 min |