

Polskie jasne EXP20

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **36**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **0 %**
- Size with trub loss **15 liter(s)**
- Boil time **30 min**
- Evaporation rate **20 %/h**
- Boil size **16.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.3 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **11.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (80%) | 80 % | 5 |
| Grain | Weyermann - Carapils | 0.25 kg (6.7%) | 78 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (13.3%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil | Amora Preta | 20 g | 15 min | 9.3 % |
| Boil | Amora Preta | 30 g | 5 min | 9.3 % |
| Boil | lunga | 8 g | 30 min | 11.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|-------|------|--------|------------|
| Lalle | Lager | Dry | 11 g | Lallemand |