

polskie w 24

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **23**
- SRM **4.9**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **63 C**, Time **20 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **73C**
- Keep mash **5 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 4.5 kg (81.8%) | 82 % | 4 |
| Grain | Strzegom Monachijski typ I | 1 kg (18.2%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil | Citra | 5 g | 60 min | 12.5 % |
| Boil | Citra | 8 g | 25 min | 12 % |
| Aroma (end of boil) | Citra | 10 g | 10 min | 12 % |
| Whirlpool | Citra | 15 g | 20 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|---------|------------|
| Safale US-05 | Ale | Dry | 12.65 g | Fermentis |