

Polish Pale Ale

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **37**
- SRM **5**
- 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 **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- 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 | Viking Pale Ale malt | 4 kg (80%) | 80 % | 5 |
| Grain | Strzegom Monachijski typ I | 1 kg (20%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Zula | 30 g | 60 min | 8.3 % |
| Aroma (end of boil) | Oktawia | 10 g | 10 min | 7.1 % |
| Aroma (end of boil) | Izabella | 15 g | 5 min | 5.1 % |
| Whirlpool | Oktawia | 10 g | 20 min | 7.1 % |
| Whirlpool | Izabella | 15 g | 20 min | 5.1 % |
| Dry Hop | Oktawia | 80 g | 3 day(s) | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|---------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 1000 ml | Fermentum Mobile |

Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Water Agent | gips piwowarski | 4 g | Mash | 60 min |