

## Polskie Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **40 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

| Type  | Name                                  | Amount       | Yield | EBC |
|-------|---------------------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt                  | 5 kg (83.3%) | 80 %  | 5.5 |
| Grain | BESTMALZ - Best Heidelberg Wheat Malt | 1 kg (16.7%) | 82 %  | 3   |

### Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Oktawia    | 30 g   | 60 min | 7.8 %      |
| Aroma (end of boil) | Oktawia    | 30 g   | 10 min | 7.8 %      |
| Whirlpool           | Cascade PL | 30 g   | 5 min  | 5.2 %      |

### Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale  | Dry  | 11.5 g | Fermentis  |