

## Polish PA z białą herbatą i morelami

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **32**
- SRM **4.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **4 %**
- Size with trub loss **13 liter(s)**
- Boil time **75 min**
- Evaporation rate **20 %/h**
- Boil size **16.6 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **11.8 liter(s)**

### Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **9.1 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

### Fermentables

| Type  | Name                        | Amount          | Yield | EBC |
|-------|-----------------------------|-----------------|-------|-----|
| Grain | Strzegom Pilzneński         | 1.5 kg (56.1%)  | 80 %  | 4   |
| Grain | Viking Pale Ale malt        | 0.5 kg (18.7%)  | 80 %  | 5   |
| Grain | Strzegom Pszeniczny         | 0.5 kg (18.7%)  | 81 %  | 6   |
| Grain | Carahell                    | 0.125 kg (4.7%) | 77 %  | 26  |
| Grain | Weyermann - Acidulated Malt | 0.05 kg (1.9%)  | 80 %  | 6   |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Chinook PL        | 15 g   | 60 min | 9.1 %      |
| Boil    | Lublin (Lubelski) | 20 g   | 15 min | 2.8 %      |

### Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| US-05 | Ale  | Slant | 100 ml | Fermentis  |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |       |           |           |
|--------|----------------|-------|-----------|-----------|
| Flavor | Suszone morele | 120 g | Secondary | 14 day(s) |
| Flavor | Biala herbata  | 40 g  | Secondary | 1 day(s)  |