

# Bitter[ ]wstępniak]

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **35**
- SRM **9.2**
- Style **Special/Best/Premium Bitter**

## 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 **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

## Fermentables

| Type  | Name                 | Amount        | Yield  | EBC |
|-------|----------------------|---------------|--------|-----|
| Grain | Monachijski          | 2 kg (47.6%)  | 80 %   | 16  |
| Grain | Karmelowy Czerwony   | 0.3 kg (7.1%) | 75 %   | 59  |
| Grain | Briess - Pilsen Malt | 1 kg (23.8%)  | 80.5 % | 2   |
| Grain | Płatki owsiane       | 0.4 kg (9.5%) | 60 %   | 3   |
| Grain | cookie               | 0.4 kg (9.5%) | 80 %   | 40  |
| Grain | Strzegom Karmel 300  | 0.1 kg (2.4%) | 70 %   | 299 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | lunga   | 30 g   | 20 min | 11 %       |
| Boil    | Fuggles | 26 g   | 10 min | 4.5 %      |
| Boil    | Tomyski | 50 g   | 10 min | 2.8 %      |