

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 % |