

Kozlak HB 20l

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **29**
- SRM **18.6**
- Style **Traditional Bock**

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 **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **73 C**, Time **20 min**

Mash step by step

- Heat up **23.8 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **73C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Strzegom Monachijski typ II | 4 kg (58.8%) | 79 % | 22 |
| Grain | Strzegom Pilzneński | 1 kg (14.7%) | 80 % | 4 |
| Grain | Strzegom Wiedeński | 1 kg (14.7%) | 79 % | 10 |
| Grain | Strzegom Karmel 150 | 0.2 kg (2.9%) | 75 % | 150 |
| Grain | Strzegom Karmel 600 | 0.2 kg (2.9%) | 68 % | 601 |
| Grain | Wayerman Melonoidynowy | 0.4 kg (5.9%) | 75 % | 70 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 30 g | 30 min | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 23 g | Fermentis |