

Kozlak

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **27**
- SRM **12.5**
- 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 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **66 C**, Time **35 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **35 min** at **66C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|-----------------|-------|-----|
| Grain | Pilzneński | 2 kg (33.3%) | 81 % | 4 |
| Grain | Monachijski | 3 kg (50%) | 80 % | 16 |
| Grain | Strzegom Karmel 30 | 0.75 kg (12.5%) | 75 % | 30 |
| Grain | Strzegom Karmel 300 | 0.25 kg (4.2%) | 70 % | 299 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 35 g | 30 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 11.5 g | Fermentis |