

Kozlak

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **30**
- SRM **12.1**
- Style **Maibock/Helles Bock**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 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)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **40 min**
- Temp **75 C**, Time **20 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **75C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Pilzneński | 1.5 kg (35.7%) | 81 % | 4 |
| Grain | Monachijski | 1.5 kg (35.7%) | 80 % | 16 |
| Grain | Monachijski Ciemny Steinbach | 0.6 kg (14.3%) | 100 % | 30 |
| Grain | Karmelowy 50 - Viking Malt | 0.2 kg (4.8%) | 79 % | 50 |
| Grain | Viking Melanoidynowy | 0.2 kg (4.8%) | 75 % | 60 |
| Grain | Słód Caramunich Typ II Weyermann | 0.2 kg (4.8%) | 73 % | 120 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 20 g | 30 min | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Fermentis W34/70 | Lager | Dry | 12 g | tb |