

KOŹLAK

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **27**
- SRM **13.8**
- 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 **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **70 C**, Time **45 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **45 min** at **70C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (44.8%) | 80 % | 4 |
| Grain | Strzegom Wiedeński | 1 kg (14.9%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (7.5%) | 79 % | 16 |
| Grain | Strzegom Bursztynowy | 0.7 kg (10.4%) | 70 % | 49 |
| Grain | Karmelowy Jasny 30EBC | 0.7 kg (10.4%) | 75 % | 30 |
| Grain | Płatki owsiane | 0.4 kg (6%) | 85 % | 3 |
| Grain | Jęczmień palony | 0.1 kg (1.5%) | 55 % | 985 |
| Grain | Jęczmień niesłodowany | 0.3 kg (4.5%) | 75 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 26 g | 60 min | 6.5 % |
| Boil | Marynka | 14 g | 40 min | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|------------------|-------|-----|------|-----------|
| Saflager W 34/70 | Lager | Dry | 23 g | Fermentis |
|------------------|-------|-----|------|-----------|

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 1.25 g | Boil | 10 min |