

Koźlak Dubeltowy

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **27**
- SRM **15.3**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **32.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **30 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **32.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Monachijski typ I | 5 kg (50%) | 79 % | 16 |
| Grain | Strzegom Wiedeński | 3 kg (30%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ II | 1 kg (10%) | 79 % | 22 |
| Grain | Weyermann - Caraamber | 0.25 kg (2.5%) | 75 % | 65 |
| Grain | Weyermann - Melanoiden Malt | 0.25 kg (2.5%) | 81 % | 53 |
| Grain | Carared | 0.25 kg (2.5%) | 75 % | 45 |
| Grain | Caraaroma | 0.25 kg (2.5%) | 78 % | 350 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil | Tradition | 50 g | 60 min | 6 % |
| Aroma (end of boil) | Książęcy | 40 g | 10 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Saflager S-23 | Lager | Dry | 23 g | Fermentis |