

Derkacz - Koźlak

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **26**
- SRM **15.9**
- 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 **120 min**
- Evaporation rate **20 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 1 kg (15.4%) | 81 % | 5 |
| Grain | Monachijski | 5 kg (76.9%) | 80 % | 16 |
| Grain | Caraaroma | 0.25 kg (3.8%) | 78 % | 400 |
| Grain | Weyermann Caramunich 3 | 0.25 kg (3.8%) | 76 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| Boil | Magnat | 15 g | 60 min | 9.5 % |
| Boil | Magnat | 15 g | 20 min | 9.8 % |
| Aroma (end of boil) | Magnat | 10 g | 10 min | 9.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|-------|-------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Slant | 200 ml | Fermentum Mobile |