

# Koźlak Dubeltowy

- Gravity **22.5 BLG**
- ABV ---
- IBU **25**
- SRM **26.9**
- Style **Doppelbock**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **13 %/h**
- Boil size **17.3 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **24.1 liter(s)**
- Total mash volume **30.8 liter(s)**

## Steps

- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **24.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **-0.1 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

## Fermentables

| Type  | Name                                         | Amount         | Yield  | EBC  |
|-------|----------------------------------------------|----------------|--------|------|
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 3 kg (44.8%)   | 80 %   | 20   |
| Grain | BESTMALZ - Best<br>Minich                    | 1.2 kg (17.9%) | 80.5 % | 16   |
| Grain | Pilzneński                                   | 1.5 kg (22.4%) | 81 %   | 4    |
| Grain | Caramunich® typ I                            | 0.4 kg (6%)    | 73 %   | 80   |
| Grain | Weyermann<br>Caramunich 3                    | 0.25 kg (3.7%) | 76 %   | 150  |
| Grain | BESTMALZ - Best<br>Melanoidin Light          | 0.25 kg (3.7%) | 75 %   | 50   |
| Grain | Weyermann -<br>Carafa III Special            | 0.1 kg (1.5%)  | 5 %    | 1300 |

## Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Iunga                 | 20 g   | 60 min | 10.3 %     |
| Aroma (end of boil) | Hallertauer Tradition | 30 g   | 0 min  | 5.2 %      |

## Yeasts

| Name                             | Type  | Form  | Amount | Laboratory |
|----------------------------------|-------|-------|--------|------------|
| WLP833 - German Bock Lager Yeast | Lager | Slant | 250 ml | White Labs |