

# koźlak

- Gravity **17.1 BLG**
- ABV ---
- IBU **30**
- SRM **11.7**
- Style **Maibock/Helles Bock**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **30.6 liter(s)**

## Steps

- Temp **63 C**, Time **10 min**
- Temp **72 C**, Time **15 min**
- Temp **100 C**, Time **15 min**
- Temp **72 C**, Time **40 min**

## Mash step by step

- Heat up **23.8 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **10 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **100C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

| Type  | Name                  | Amount        | Yield | EBC |
|-------|-----------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński   | 4 kg (58.8%)  | 80 %  | 4   |
| Grain | Monachijski           | 2 kg (29.4%)  | 80 %  | 16  |
| Grain | Karmelowy Czerwony    | 0.5 kg (7.4%) | 75 %  | 59  |
| Grain | Weyermann - Caraamber | 0.2 kg (2.9%) | 75 %  | 65  |
| Grain | Weyermann - Carared   | 0.1 kg (1.5%) | 75 %  | 45  |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 60 min | 10 %       |
| Boil    | Lublin (Lubelski) | 30 g   | 10 min | 4 %        |

## Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 11.5 g | Fermentis  |

## Notes

- Po pierwszej przerwie 1/3 dekoka.  
Po trzeciej przerwie dekoka wraca do głównego wara.  
*Mar 1, 2016, 9:07 AM*