

# Koźlak wędzony

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **27**
- SRM **7.9**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **40.5 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **31.5 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount        | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt       | 5 kg (55.6%)  | 80 %  | 5   |
| Grain | Wędzony torfem Viking Malt | 2 kg (22.2%)  | 82 %  | 10  |
| Grain | Strzegom Karmel 30         | 0.6 kg (6.7%) | 75 %  | 30  |
| Grain | Płatki pszeniczne          | 0.5 kg (5.6%) | 60 %  | 3   |
| Grain | Strzegom Monachijski typ I | 0.9 kg (10%)  | 79 %  | 16  |

## Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Marynka               | 31 g   | 60 min | 8 %        |
| Aroma (end of boil) | Chinook               | 23 g   | 5 min  | 6.2 %      |
| Aroma (end of boil) | Junga                 | 23 g   | 5 min  | 10 %       |
| Aroma (end of boil) | Saaz (Czech Republic) | 10 g   | 5 min  | 4 %        |

## Yeasts

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

|              |     |       |        |     |
|--------------|-----|-------|--------|-----|
| Safale US-05 | Ale | Slant | 200 ml | --- |
|--------------|-----|-------|--------|-----|