

# koziół na dymie

- Gravity **22.2 BLG**
- ABV ---
- IBU **29**
- SRM **21.1**
- 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 **120 min**
- Evaporation rate **10 %/h**
- Boil size **34.6 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.2 liter(s)**
- Total mash volume **37.6 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**

## Mash step by step

- Heat up **28.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **34.6 liter(s)** of wort

## Fermentables

| Type  | Name                               | Amount         | Yield  | EBC |
|-------|------------------------------------|----------------|--------|-----|
| Grain | Strzegom Monachijski typ I         | 2.1 kg (22.3%) | 79 %   | 16  |
| Grain | Grodziski pszeniczny wędzony dębem | 1.5 kg (16%)   | 80 %   | 5   |
| Grain | Strzegom Wiedeński                 | 1 kg (10.6%)   | 79 %   | 10  |
| Grain | Melanoiden Malt                    | 0.2 kg (2.1%)  | 80 %   | 39  |
| Grain | Karmelowy Czerwony                 | 0.2 kg (2.1%)  | 75 %   | 59  |
| Grain | Strzegom Monachijski typ II        | 2 kg (21.3%)   | 79 %   | 22  |
| Grain | Strzegom Pilzneński                | 2 kg (21.3%)   | 80 %   | 4   |
| Grain | Weyermann Specjal W                | 0.2 kg (2.1%)  | 68 %   | 300 |
| Grain | Special B Malt                     | 0.2 kg (2.1%)  | 65.2 % | 315 |

## Hops

| Use for | Name    | Amount | Time    | Alpha acid |
|---------|---------|--------|---------|------------|
| Boil    | Marynka | 30 g   | 120 min | 10 %       |
| Boil    | Sybilla | 30 g   | 120 min | 3.5 %      |

## Yeasts

| Name    | Type  | Form  | Amount | Laboratory |
|---------|-------|-------|--------|------------|
| w-34/70 | Lager | Slant | 350 ml | fermentis  |