

# Koziółek

- Gravity **16.8 BLG**
- ABV ---
- IBU **16**
- SRM **21**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **32.6 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **45 min**

## Mash step by step

- Heat up **24.5 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **45 min** at **72C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC  |
|-------|----------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński        | 1.8 kg (22.1%) | 80 %  | 4    |
| Grain | Strzegom Wiedeński         | 1.8 kg (22.1%) | 79 %  | 10   |
| Grain | Strzegom Monachijski typ I | 3.5 kg (42.9%) | 79 %  | 16   |
| Grain | Strzegom Karmel 300        | 0.2 kg (2.5%)  | 70 %  | 299  |
| Grain | Carabelge                  | 0.25 kg (3.1%) | 80 %  | 30   |
| Grain | Abbey Castle               | 0.25 kg (3.1%) | 80 %  | 45   |
| Grain | Strzegom Karmel 150        | 0.3 kg (3.7%)  | 75 %  | 100  |
| Grain | Strzegom Barwiący          | 0.05 kg (0.6%) | 68 %  | 1300 |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Tradition | 25 g   | 75 min | 4 %        |
| Boil    | Tradition | 15 g   | 60 min | 4 %        |
| Boil    | Tradition | 15 g   | 20 min | 4 %        |

## Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Name                    | Type  | Form  | Amount | Laboratory       |
|-------------------------|-------|-------|--------|------------------|
| FM31 Bawarska<br>Dolina | Lager | Slant | 500 ml | Fermentum Mobile |