

podwędzane ciemne żytko; 33

- Gravity **14.5 BLG**
- ABV ---
- IBU **16**
- SRM **28.4**
- Style **Other Smoked Beer**

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 **75 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **14.3 liter(s)**
- Total mash volume **20.5 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.3 liter(s)** of strike water to **78.4C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **20.9 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------------|---------------|--------|------|
| Grain | Strzegom Monachijski typ II | 1 kg (16.1%) | 79 % | 22 |
| Grain | Żytni | 0.5 kg (8.1%) | 85 % | 8 |
| Grain | pilzenski | 3 kg (48.4%) | 80.5 % | 4 |
| Grain | Strzegom Karmel 30 | 0.1 kg (1.6%) | 75 % | 30 |
| Grain | Strzegom Karmel 150 | 0.2 kg (3.2%) | 75 % | 150 |
| Grain | Grodziński pszeniczny wędzony dębem | 1 kg (16.1%) | 80 % | 3 |
| Grain | Karmelowy żytni Strzegom | 0.1 kg (1.6%) | 75 % | 150 |
| Grain | Strzegom Czekoladowy jasny | 0.1 kg (1.6%) | 68 % | 400 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (1.6%) | 68 % | 1200 |
| Grain | Jęczmień palony | 0.1 kg (1.6%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Sybilla | 20 g | 60 min | 7.5 % |

| | | | | |
|------|---------|------|-------|-------|
| Boil | Sybilla | 10 g | 5 min | 7.5 % |
|------|---------|------|-------|-------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| us-05 | Ale | Slant | 250 ml | --- |