

Trzy słody

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **19**
- SRM **5.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **2 %**
- Size with trub loss **12.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **77C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Rahr - Premium Pilsner Malt | 2 kg (57.1%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.6 kg (17.1%) | 79 % | 16 |
| Grain | Strzegom Wiedeński | 0.6 kg (17.1%) | 79 % | 10 |
| Grain | Weyermann - Carapils | 0.3 kg (8.6%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|----------|------------|
| Boil | lunga | 10 g | 50 min | 11 % |
| Aroma (end of boil) | Saaz (Czech Republic) | 7 g | 5 min | 4.5 % |
| Aroma (end of boil) | Sybilla | 7.5 g | 5 min | 3.5 % |
| Dry Hop | Saaz (Czech Republic) | 10 g | 5 day(s) | 4.5 % |
| Dry Hop | Sybilla | 10 g | 5 day(s) | 3.5 % |

Yeasts

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

| | | | | |
|-------------|-----|-----|--------|-----------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |
|-------------|-----|-----|--------|-----------|