

## 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	Iunga	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
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Safale S-04	Ale	Dry	11.5 g	Fermentis
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