

siedem

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **52**
- SRM **4.1**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **42 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **49.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.7 liter(s)**
- Total mash volume **34.3 liter(s)**

Steps

- Temp **63 C**, Time **45 min**
- Temp **68 C**, Time **10 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **25.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **10 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **32.6 liter(s)** of **76C** water or to achieve **49.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	8.283 kg (96.5%)	79 %	6
Grain	Weyermann - Carapils	0.298 kg (3.5%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	66 g	60 min	10 %
Boil	Magnum	10 g	60 min	13.5 %
Boil	Saaz (Czech Republic)	38 g	10 min	4.5 %
Boil	Mosaic	44 g	2 min	10 %
Boil	Lublin (Lubelski)	30 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	23 g	Safale