

## Resztki #1

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **26**
- SRM **28.9**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **80 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **80C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (80%)	79 %	5
Adjunct	Pszenica niesłodowana	0.5 kg (8%)	75 %	3
Grain	Czekoladowy	0.25 kg (4%)	60 %	788
Grain	Strzegom Karmel 300	0.25 kg (4%)	70 %	299
Grain	Jęczmień palony	0.25 kg (4%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	50 g	60 min	5.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis