

## ciemne07-2018

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **34.4**
- Style **Sweet 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 **15.8 liter(s)**
- Total mash volume **21 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **15.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (66.7%)	80 %	4
Grain	Karmelowy Pszeniczny Strzegom	0.45 kg (8.6%)	79 %	130
Grain	Strzegom Czekoladowy ciemny	0.25 kg (4.8%)	68 %	1200
Grain	Strzegom Karmel 600	0.55 kg (10.5%)	68 %	601
Grain	Płatki owsiane	0.5 kg (9.5%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	10 g	60 min	7 %
Boil	Cascade	20 g	30 min	6 %
Boil	Lublin (Lubelski)	20 g	20 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	5 g	---