

CZARNY CLOWN Mikkeler

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **38**
- SRM **34.6**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **67 C**, Time **75 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	słód pilzneński	1 kg (33.3%)	78 %	2
Grain	Słód pszeniczny	0.5 kg (16.7%)	82 %	5
Grain	Honey Malt	0.4 kg (13.3%)	80 %	15
Grain	Płatki owsiane	0.2 kg (6.7%)	85 %	3
Grain	Barley, Torrefied	0.3 kg (10%)	79 %	4
Grain	Fawcett - Brown	0.3 kg (10%)	72 %	180
Grain	Strzegom Czekoladowy ciemny	0.3 kg (10%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	10 g	90 min	8.8 %
Boil	Chinook	5 g	90 min	12.4 %
Boil	Cascade	5 g	90 min	7 %
Boil	Cascade	25 g	1 min	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	240 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Flavor	kawa	28 g	Secondary	2 day(s)