

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) |