

# Mózgozwęglacz

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **46**
- SRM **44.2**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **17.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

## Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **17.7 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount          | Yield | EBC  |
|-------|----------------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt             | 2.28 kg (42.6%) | 80 %  | 5    |
| Grain | Viking Munich Malt               | 1 kg (18.7%)    | 78 %  | 18   |
| Grain | Barley, Flaked                   | 0.3 kg (5.6%)   | 70 %  | 4    |
| Grain | Oats, Flaked                     | 0.2 kg (3.7%)   | 80 %  | 2    |
| Grain | Strzegom<br>Czekoladowy ciemny   | 0.1 kg (1.9%)   | 68 %  | 1200 |
| Grain | Jęczmień palony                  | 0.27 kg (5%)    | 55 %  | 985  |
| Grain | Strzegom Karmel<br>600           | 0.2 kg (3.7%)   | 68 %  | 601  |
| Grain | Strzegom<br>Monachijski typ II   | 0.3 kg (5.6%)   | 79 %  | 22   |
| Grain | Viking Wheat Malt                | 0.2 kg (3.7%)   | 83 %  | 5    |
| Grain | Strzegom Barwiący                | 0.1 kg (1.9%)   | 68 %  | 1300 |
| Grain | Karmelowy<br>Pszeniczny Strzegom | 0.2 kg (3.7%)   | 79 %  | 130  |
| Grain | Viking<br>melanoidynowy          | 0.2 kg (3.7%)   | 75 %  | 60   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Marynka | 40 g   | 60 min | 8.7 %      |

### Yeasts

| Name                      | Type | Form   | Amount  | Laboratory       |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 1000 ml | Fermentum Mobile |

### Extras

| Type        | Name          | Amount | Use for | Time   |
|-------------|---------------|--------|---------|--------|
| Water Agent | węglan wapnia | 3 g    | Mash    | 60 min |

### Notes

- Opcjonalnie można dorzucić kawy (mało kwaskowej) na cichą na 3-5 dni macerowanej w małej ilości alkoholu:)

piwo zajęło 6 miejsce z notą 36pkt na IV Flisackim kpd 2018  
 May 29, 2018, 8:28 PM