

outstut

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **31**
- SRM **22.5**
- Style **Oatmeal 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 **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Pilzneński | 1.9 kg (42.2%) | 81 % | 4 |
| Grain | Monachijski | 1.1 kg (24.4%) | 80 % | 16 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (5.6%) | 68 % | 1100 |
| Grain | Strzegom Karmel 300 | 0.25 kg (5.6%) | 70 % | 299 |
| Grain | Płatki owsiane | 1 kg (22.2%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Fuggles | 50 g | 60 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-04 | Ale | Dry | 11.5 g | --- |