

imperial stout

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **16**
- SRM **27**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **29.1 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|---------------|-------|------|
| Grain | Strzegom Pilzneński | 6 kg (72.3%) | 80 % | 4 |
| Grain | Monachijski typ II 20-25 EBC Weyermann | 1 kg (12%) | 80 % | 20 |
| Grain | castle malting chateau cara ruby | 0.5 kg (6%) | 70 % | 45 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (2.4%) | 68 % | 1000 |
| Grain | Jęczmień palony | 0.3 kg (3.6%) | 55 % | 900 |
| Grain | Płatki owsiane | 0.3 kg (3.6%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 10 g | 60 min | 15.5 % |
| Boil | Citra | 20 g | 5 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 23 g | Fermentis |