

Imperialny Stout - kooperacja

- Gravity **28.9 BLG**
- ABV **14.1 %**
- IBU **41**
- SRM **43.6**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **30.2 liter(s)**

Steps

- Temp **68 C**, Time **90 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | Pilzneński | 7 kg (63.3%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (9%) | 80 % | 16 |
| Grain | Żytni | 0.5 kg (4.5%) | 85 % | 8 |
| Grain | Briess - Chocolate Malt | 0.25 kg (2.3%) | 60 % | 690 |
| Grain | Żytni czekoladowy | 0.25 kg (2.3%) | 60 % | 700 |
| Grain | Strzegom Karmel 300 | 0.8 kg (7.2%) | 70 % | 299 |
| Grain | Weyermann - Carafa III Special | 0.25 kg (2.3%) | 70 % | 1024 |
| Sugar | Brown Sugar, Dark Muscovado | 1 kg (9%) | 100 % | 99 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 50 g | 60 min | 11 % |
| Boil | lunga | 20 g | 30 min | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|-------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Slant | 300 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 15 min |