

Irish stout piwowar

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **33**
- SRM **31.1**
- Style **American 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 **5 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|---------------|-------|------|
| Grain | Viking Pale Ale malt | 2.8 kg (70%) | 80 % | 5 |
| Grain | Płatki jęczmienne | 0.6 kg (15%) | 75 % | --- |
| Grain | Jęczmień palony | 0.3 kg (7.5%) | 55 % | 985 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.3 kg (7.5%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Phoenix | 20 g | 60 min | 11 % |
| Boil | Fuggles | 20 g | 20 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|-------|--------|------------|
| WLP007 - Dry English Ale Yeast | Ale | Slant | 140 ml | White Labs |