

Brown Porter

- Gravity **12.4 BLG**
- ABV ---
- IBU **34**
- SRM **25.8**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss --- %
- Size with trub loss --- **liter(s)**
- Boil time **60 min**
- Evaporation rate --- %/h
- Boil size --- **liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio --- **liter(s) / kg**
- Mash size --- **liter(s)**
- Total mash volume --- **liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **liter(s)** of strike water to **C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **0 min** at **78C**
- Sparge using **liter(s)** of **C** water

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------|--------|--------|------|
| Grain | Pale Ale | 3 kg | 80 % | 5.9 |
| Grain | Brown | 0.5 kg | 75 % | 180 |
| Grain | Karmelowy 60 | 0.3 kg | 76.5 % | 60 |
| Grain | Karmelowy 130 | 0.2 kg | 74.7 % | 130 |
| Grain | Czekoladowy | 0.1 kg | 60 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 10.5 % |
| Boil | Golding | 50 g | 7 min | 6.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| Irlandzkie ciemności | Ale | Slant | 500 ml | Fermentum Mobile |