

## Brown Porter

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **19**
- SRM **15.4**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

### Fermentables

| Type  | Name                           | Amount         | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt           | 4 kg (74.8%)   | 80 %  | 5   |
| Grain | Brown Malt (British Chocolate) | 0.45 kg (8.4%) | 70 %  | 128 |
| Grain | Caraamber                      | 0.25 kg (4.7%) | 75 %  | 59  |
| Grain | Strzegom Karmel 150            | 0.2 kg (3.7%)  | 75 %  | 150 |
| Grain | Płatki jęczmienne              | 0.3 kg (5.6%)  | 85 %  | 3   |
| Grain | Carafa special                 | 0.15 kg (2.8%) | 70 %  | 664 |

### Hops

| Use for | Name            | Amount | Time   | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil    | Styrian Golding | 45 g   | 60 min | 3.6 %      |
| Boil    | Styrian Golding | 15 g   | 10 min | 3.6 %      |