

# imperial brown porter

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- Gravity **19.1 BLG**
- ABV **8.3 %**
- IBU **31**
- SRM **37.7**
- Style **Brown Porter**

## 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 **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **22.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **10.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC  |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt        | 5.5 kg (70.5%) | 80 %  | 5    |
| Grain | Strzegom Karmel 150         | 1.5 kg (19.2%) | 75 %  | 150  |
| Grain | Strzegom Czekoladowy jasny  | 0.2 kg (2.6%)  | 68 %  | 400  |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (3.2%) | 68 %  | 1200 |
| Grain | Viking Barwiący Obłuszczony | 0.15 kg (1.9%) | 65 %  | 1000 |
| Sugar | Brown Sugar, Dark           | 0.2 kg (2.6%)  | 100 % | 99   |

## Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Cascade PL | 10 g   | 65 min | 5.2 %      |
| Boil    | Chinook    | 10 g   | 65 min | 13 %       |
| Boil    | Cascade PL | 54 g   | 10 min | 5.2 %      |
| Boil    | Vic Secret | 10 g   | 5 min  | 16.3 %     |
| Boil    | Calista    | 50 g   | 5 min  | 3.9 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |