

Brown Ale (SH Centennial)

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **64**
- SRM **28.8**
- Style **Brown IPA**

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 **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **14.5 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 | 2 kg (37%) | 80 % | 5 |
| Grain | Karmelowy Czerwony | 1 kg (18.5%) | 75 % | 59 |
| Grain | Carahell | 1 kg (18.5%) | 77 % | 26 |
| Grain | Weyermann Caramunich 3 | 0.5 kg (9.3%) | 76 % | 150 |
| Grain | Carafa | 0.2 kg (3.7%) | 70 % | 664 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (3.7%) | 68 % | 1200 |
| Grain | Oats, Flaked | 0.5 kg (9.3%) | 80 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Centennial | 40 g | 60 min | 10.5 % |
| Boil | Centennial | 20 g | 30 min | 10.5 % |
| Boil | Centennial | 30 g | 1 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 100 ml | Fermentis |