

Sweet stout 1

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **24**
- SRM **26.8**
- Style **Sweet 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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **20.9 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **66 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **10 min** at **66C**
- Keep mash **70 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 3.7 kg (79.6%) | 80 % | 7 |
| Grain | Karmelowy Czerwony | 0.4 kg (8.6%) | 75 % | 59 |
| Grain | Briess - Chocolate Malt | 0.35 kg (7.5%) | 60 % | 690 |
| Grain | Jęczmień palony | 0.2 kg (4.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Northdown | 25 g | 60 min | 8.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale | Dry | 10 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------|--------|---------|--------|
| Spice | Laktoza | 500 g | Boil | 15 min |