

święteczny stout 2020

- Gravity **15.9 BLG**
- ABV ---
- IBU **36**
- SRM **44.2**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **5 %/h**
- Boil size **24.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **24.7 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|----------------|-------|------|
| Grain | Pilzneński | 5.5 kg (84.6%) | 81 % | 4 |
| Grain | Fawcett - Pszoniczny Czekoladowy | 1 kg (15.4%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Horizon | 10 g | 60 min | 14 % |
| Boil | Cascade | 29.6 g | 15 min | 6.8 % |
| Boil | Horizon | 19.5 g | 15 min | 14 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------------|--------|---------|--------|
| Flavor | suska sechlońska | 750 g | Boil | 20 min |
| Flavor | laktoza | 1000 g | Boil | 20 min |

| | | | | |
|--------|---------------------------|-------|-----------|-----------|
| Flavor | suska sechlońska | 250 g | Secondary | 5 day(s) |
| Flavor | płatki dębowe w bourbonie | 30 g | Secondary | 14 day(s) |