

## sto-ut

---

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **34.6**
- Style **Sweet Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21.4 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **16 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Pilzneński                     | 3.5 kg (65.4%) | 81 %  | 4    |
| Grain | Caraaroma                      | 0.4 kg (7.5%)  | 78 %  | 400  |
| Grain | Strzegom<br>Czekoladowy ciemny | 0.2 kg (3.7%)  | 68 %  | 1200 |
| Grain | Jęczmień palony                | 0.25 kg (4.7%) | 55 %  | 985  |
| Grain | Płatki owsiane                 | 0.8 kg (15%)   | 85 %  | 3    |
| Grain | Strzegom Karmel<br>600         | 0.2 kg (3.7%)  | 68 %  | 601  |

### Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 60 min | 9.6 %      |
| Boil    | Lublin (Lubelski) | 20 g   | 5 min  | 4 %        |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | ---        |