

test

- Gravity **13.2 BLG**
- ABV ---
- IBU **57**
- SRM **12.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 4 kg (83.3%) | 79 % | 6 |
| Grain | Strzegom Karmel 150 | 0.5 kg (10.4%) | 75 % | 150 |
| Grain | Pszeniczny | 0.3 kg (6.3%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | lunga | 25 g | 30 min | 11 % |
| Aroma (end of boil) | Marynka | 10 g | 5 min | 10 % |
| Boil | lunga | 25 g | 60 min | 11 % |
| Aroma (end of boil) | Sybilla | 25 g | 0 min | 3.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |