

Żonkowy stout

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **24**
- SRM **24.5**
- 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 **11 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **35 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **15.2 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **35 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Mep@ale | 0.9 kg (20.7%) | 81 % | 8.5 |
| Grain | MEP@Lager | 2.4 kg (55.2%) | 82 % | 6 |
| Grain | Strzegom Czekoladowy jasny | 0.25 kg (5.7%) | 68 % | 400 |
| Grain | Strzegom Karmel 30 | 0.1 kg (2.3%) | 75 % | 30 |
| Grain | Jęczmień palony | 0.35 kg (8%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.35 kg (8%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | Perle | 30 g | 60 min | 6 % |
| Boil | Perle | 20 g | 15 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 150 ml | Fermentis |