

żytni stout

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **25**
- SRM **35.2**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | Suflet Pale Ale malt | 2.5 kg (41.7%) | 80 % | 5 |
| Grain | Żytni | 2 kg (33.3%) | 85 % | 8 |
| Grain | Karmelowy żytni Strzegom | 0.5 kg (8.3%) | 75 % | 150 |
| Grain | Słód Żytni Czekoladowy Weyermann | 1 kg (16.7%) | 75 % | 700 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 25 g | 50 min | 11 % |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|---------|---------|--------|
| Water Agent | woda z Biedry | 21000 g | Mash | 90 min |
| Water Agent | gips piwowarski | 5 g | Mash | 90 min |
| Water Agent | kwas | 4 g | Mash | 90 min |