

2 x Żytni

- Gravity **28.7 BLG**
- ABV **14 %**
- IBU **71**
- SRM **63.2**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **24.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **26 liter(s)**
- Total mash volume **39 liter(s)**

Steps

- Temp **65 C**, Time **90 min**

Mash step by step

- Heat up **26 liter(s)** of strike water to **76.3C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **24.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 8 kg (61.5%) | 81 % | 6 |
| Grain | Płatki pszeniczne | 1.8 kg (13.8%) | 85 % | 3 |
| Grain | Karmelowy żytni Strzegom | 1.2 kg (9.2%) | 75 % | 150 |
| Grain | Weyermann - Chocolate Rye | 1 kg (7.7%) | 20 % | 493 |
| Grain | Jęczmień palony | 1 kg (7.7%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Warrior | 80 g | 60 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |