

Rye Saison

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **4.7**
- Style **Saison**

Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **63 C**, Time **45 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **63C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|----------------|-------|-----|
| Grain | Pilzneński | 3.5 kg (58.3%) | 81 % | 4 |
| Grain | Żytni | 2 kg (33.3%) | 85 % | 8 |
| Grain | Strzegom Wiedeński | 0.5 kg (8.3%) | 79 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Marco Polo | 20 g | 30 min | 12.8 % |
| Boil | Marco Polo | 30 g | 10 min | 12.8 % |
| Dry Hop | Zula | 50 g | 3 day(s) | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M29 French Saison | Ale | Dry | 10 g | Mangrove Jack's |