

saison

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **28**
- SRM **11.2**
- Style **Saison**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **3 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **70 min**
- Evaporation rate **8 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **63 C**, Time **70 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **70 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 3 kg (52.2%) | 80 % | 4 |
| Grain | Strzegom Wiedeński | 1 kg (17.4%) | 79 % | 10 |
| Grain | Strzegom Pszeniczny | 1 kg (17.4%) | 81 % | 6 |
| Grain | Carahell | 0.25 kg (4.3%) | 77 % | 26 |
| Grain | Caraaroma | 0.25 kg (4.3%) | 78 % | 400 |
| Sugar | cukier | 0.25 kg (4.3%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 7.2 % |
| Boil | Lomik | 10 g | 45 min | 6.2 % |
| Boil | Lomik | 25 g | 3 min | 6.2 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------------------|--------|---------|-------|
| Flavor | skórka słodkiej pomarańczy | 20 g | Boil | 5 min |
| Flavor | curacao | 20 g | Boil | 5 min |