

**XXX**

- Gravity **11.7 BLG**
- ABV ---
- IBU **33**
- SRM **4.6**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (44.4%)	80 %	5
Grain	Strzegom Pszeniczny	2 kg (44.4%)	81 %	6
Adjunct	ryż	0.5 kg (11.1%)	80 %	1

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	10 g	60 min	15.5 %
Boil	Citra	10 g	15 min	12 %
Boil	Citra	10 g	10 min	12 %
Boil	Citra	10 g	5 min	12 %
Aroma (end of boil)	Mosaic	13 g	0 min	10 %
Whirlpool	Mosaic	12 g	0 min	10 %
Dry Hop	Mosaic	25 g	4 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	12 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Flavor	skórka limonki	30 g	Secondary	4 day(s)