

Pacific rye

- Gravity **13.3 BLG**
- ABV ---
- IBU **26**
- SRM **12.8**
- Style **American Pale Ale**

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 **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 3 kg (54.5%) | 79 % | 6 |
| Grain | Żytni | 2 kg (36.4%) | 85 % | 8 |
| Grain | Karmelowy żytni Strzegom | 0.5 kg (9.1%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------|--------|----------|------------|
| Boil | Green Bullet | 30 g | 30 min | 11 % |
| Boil | Rakau (NZ) | 15 g | 0 min | 9.5 % |
| Dry Hop | Rakau (NZ) | 15 g | 7 day(s) | 9.5 % |
| Dry Hop | Pacifica (NZ) | 30 g | 3 day(s) | 4.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |