

NZIPA #_b_ro

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **53**
- SRM **6.9**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **7 %**
- Size with trub loss **26.2 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **30.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------|-----------------|-------|-----|
| Grain | Castle Pale Ale | 5 kg (80%) | 80 % | 8 |
| Grain | Płatki pszeniczne | 1 kg (16%) | 85 % | 3 |
| Grain | Strzegom Karmel 150 | 0.175 kg (2.8%) | 75 % | 150 |
| Grain | Karmelowy Jasny 30EBC | 0.077 kg (1.2%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------|--------|----------|------------|
| Boil | Green Bullet | 40 g | 60 min | 11 % |
| Boil | Green Bullet | 20 g | 30 min | 11 % |
| Aroma (end of boil) | Cascade | 40 g | 0 min | 6 % |
| Dry Hop | Cascade | 60 g | 4 day(s) | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |