

Ne ipa Czarek ver 6 Ph kwas

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **56**
- SRM **5.6**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **1 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.92 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **69 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.6 liter(s)** of strike water to **72.7C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **69C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 4.3 kg (58.1%) | 79 % | 6 |
| Grain | Strzegom Pszeniczny | 1 kg (13.5%) | 81 % | 6 |
| Grain | Żytni | 0.5 kg (6.8%) | 85 % | 8 |
| Grain | Oats, Flaked | 0.8 kg (10.8%) | 80 % | 2 |
| Grain | Barley, Flaked | 0.8 kg (10.8%) | 70 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|----------|------------|
| Boil | lunga | 30 g | 45 min | 10.3 % |
| Boil | zibi | 20 g | 30 min | 8 % |
| Boil | lunga | 30 g | 10 min | 10.3 % |
| Aroma (end of boil) | lunga | 40 g | 5 min | 10.3 % |
| Aroma (end of boil) | Zibi | 30 g | 5 min | 8 % |
| Whirlpool | zibi | 50 g | 0 min | 8 % |
| Dry Hop | Exp 2/20 Polishops | 400 g | 3 day(s) | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11 g | Safbrew |