

# 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    |