

# Zimna ipa w smaku pełna w hooy

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **53**
- SRM **5.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount       | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt       | 5 kg (71.4%) | 80 %  | 5   |
| Grain | Pszeniczny                 | 1 kg (14.3%) | 85 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1 kg (14.3%) | 79 %  | 16  |

## Hops

| Use for   | Name     | Amount | Time   | Alpha acid |
|-----------|----------|--------|--------|------------|
| Boil      | Książęcy | 30 g   | 15 min | 7 %        |
| Boil      | Książęcy | 20 g   | 5 min  | 7 %        |
| Whirlpool | Książęcy | 100 g  | 30 min | 1 %        |
| Boil      | Magnat   | 35 g   | 60 min | 11.2 %     |