

# IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **42**
- SRM **11.5**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **34.4 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **25.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount         | Yield | EBC |
|-------|-------------------------------|----------------|-------|-----|
| Grain | Pale Ale - Strzegom           | 5 kg (58.1%)   | 70 %  | 6   |
| Grain | Monachijski typ II - Strzegom | 3.5 kg (40.7%) | 70 %  | 22  |
| Grain | Karmelowy 600 - Strzegom      | 0.1 kg (1.2%)  | 68 %  | 600 |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Willamette - USA  | 20 g   | 60 min | 5.2 %      |
| Boil    | Marynka           | 37 g   | 60 min | 8.8 %      |
| Boil    | Willamette - USA  | 10 g   | 20 min | 5.2 %      |
| Boil    | Lublin (Lubelski) | 20 g   | 20 min | 3.5 %      |

## Yeasts

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