

# IPA- listopadowa

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **41**
- SRM **6.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **24.2 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **77 C**, Time **3 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **3 min** at **77C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 4 kg (66.1%)   | 85 %  | 7   |
| Grain | Strzegom Karmel 150       | 0.15 kg (2.5%) | 75 %  | 150 |
| Grain | Maris Otter Crisp         | 0.9 kg (14.9%) | 83 %  | 6   |
| Grain | Pszeniczny                | 0.5 kg (8.3%)  | 85 %  | 4   |
| Grain | Płatki owsiane            | 0.5 kg (8.3%)  | 60 %  | 3   |

## Hops

| Use for | Name        | Amount | Time     | Alpha acid |
|---------|-------------|--------|----------|------------|
| Boil    | amora preta | 20 g   | 60 min   | 11.2 %     |
| Boil    | amora preta | 20 g   | 30 min   | 11.2 %     |
| Boil    | amora preta | 10 g   | 10 min   | 11.2 %     |
| Dry Hop | Amarillo    | 100 g  | 2 day(s) | 8.5 %      |
| Dry Hop | nectaron    | 100 g  | 2 day(s) | 9.9 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Fermentis  |