

# Polish ipa

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **52**
- SRM **4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **11.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Pilznieński       | 2.8 kg (75.7%) | 81 %  | 4   |
| Grain | Pszeniczny        | 0.5 kg (13.5%) | 85 %  | 4   |
| Grain | Płatki owsiane    | 0.2 kg (5.4%)  | 60 %  | 3   |
| Grain | Płatki pszeniczne | 0.2 kg (5.4%)  | 60 %  | 3   |

## Hops

| Use for   | Name           | Amount | Time   | Alpha acid |
|-----------|----------------|--------|--------|------------|
| Boil      | Zula           | 10 g   | 60 min | 8.3 %      |
| Boil      | Książęcy       | 20 g   | 30 min | 7 %        |
| Boil      | Rody hodowlane | 30 g   | 10 min | 9.2 %      |
| Whirlpool | Rody hodowlane | 20 g   | 15 min | 9.2 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |

## Extras

| Type        | Name | Amount | Use for | Time   |
|-------------|------|--------|---------|--------|
| Water Agent | Gips | 5 g    | Mash    | 90 min |

|        |      |     |      |        |
|--------|------|-----|------|--------|
| Fining | mech | 5 g | Boil | 10 min |
|--------|------|-----|------|--------|