

# Polska ipa

---

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **49**
- SRM **6.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **25.7 liter(s)**
- Total mash volume **33.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **25.7 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 5 kg (64.1%)   | 81 %  | 6   |
| Grain | Strzegom Pilzneński    | 1.5 kg (19.2%) | 80 %  | 4   |
| Grain | Melanoiden Malt        | 0.5 kg (6.4%)  | 80 %  | 39  |
| Grain | Briess - Carapils Malt | 0.4 kg (5.1%)  | 74 %  | 3   |
| Grain | Płatki owsiane         | 0.4 kg (5.1%)  | 60 %  | 3   |

## Hops

| Use for   | Name     | Amount | Time     | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil      | lunga    | 20 g   | 60 min   | 11 %       |
| Boil      | lunga    | 30 g   | 20 min   | 11 %       |
| Boil      | Puławski | 30 g   | 20 min   | 7.5 %      |
| Whirlpool | Puławski | 30 g   | 0 min    | 8.9 %      |
| Whirlpool | Izabella | 30 g   | 0 min    | 5.1 %      |
| Whirlpool | Sybilla  | 30 g   | 0 min    | 3.5 %      |
| Dry Hop   | Izabella | 60 g   | 5 day(s) | 5.1 %      |
| Dry Hop   | Sybilla  | 60 g   | 5 day(s) | 3.5 %      |

|         |          |      |          |       |
|---------|----------|------|----------|-------|
| Dry Hop | Puławski | 30 g | 5 day(s) | 8.9 % |
|---------|----------|------|----------|-------|

### Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Liquid | 200 ml | Fermentum Mobile |

### Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Water Agent | Gips           | 5 g    | Mash    | 60 min |
| Fining      | Mech irlandzki | 5 g    | Boil    | 15 min |