

# werbena ipa

---

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **43**
- SRM **3.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **5 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount      | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (100%) | 80 %  | 5   |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | WAI-ITI  | 50 g   | 10 min   | 4.1 %      |
| Boil    | Motueka  | 50 g   | 10 min   | 7 %        |
| Boil    | Książęcy | 30 g   | 60 min   | 7 %        |
| Dry Hop | WAI-ITI  | 50 g   | 2 day(s) | 4.1 %      |
| Dry Hop | Motueka  | 50 g   | 2 day(s) | 7 %        |

## Yeasts

| Name          | Type | Form | Amount | Laboratory |
|---------------|------|------|--------|------------|
| Safale US-051 | Ale  | Dry  | 11 g   | Fermentis  |

## Extras

| Type  | Name              | Amount | Use for | Time   |
|-------|-------------------|--------|---------|--------|
| Spice | werbena cytrynowa | 25 g   | Boil    | 15 min |