

# IPA plus Warjacje

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **37**
- SRM **4.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **66 liter(s)**
- Trub loss **2 %**
- Size with trub loss **68.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **78.4 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **60 liter(s)**
- Total mash volume **80 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **60 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **38.4 liter(s)** of **76C** water or to achieve **78.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount          | Yield | EBC |
|-------|----------------------------|-----------------|-------|-----|
| Grain | Viking Pilsner malt        | 14.5 kg (72.5%) | 82 %  | 4   |
| Grain | Weyermann pszeniczny jasny | 4 kg (20%)      | 80 %  | 6   |
| Grain | Płatki owsiane             | 1.5 kg (7.5%)   | 60 %  | 3   |

## Hops

| Use for   | Name              | Amount | Time   | Alpha acid |
|-----------|-------------------|--------|--------|------------|
| Boil      | lunga             | 140 g  | 10 min | 10.3 %     |
| Whirlpool | Mandarina Bavaria | 200 g  | 30 min | 9.1 %      |