

# IPA Mandaryna

- Gravity **15.2 BLG**
- ABV ---
- IBU **115**
- SRM **10.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **30.4 liter(s)**

## Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale   | 5 kg (65.8%)  | 79 %  | 6   |
| Grain | Strzegom Pilzneński | 0.6 kg (7.9%) | 80 %  | 4   |
| Grain | Karmelowy Czerwony  | 0.5 kg (6.6%) | 75 %  | 59  |
| Grain | Bestmalz Red X      | 1 kg (13.2%)  | 79 %  | 30  |
| Grain | Chit Malt           | 0.5 kg (6.6%) | 50 %  | 2   |

## Hops

| Use for             | Name              | Amount | Time     | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Boil                | Warrior           | 30 g   | 55 min   | 15.5 %     |
| Boil                | Sorachi Ace       | 30 g   | 30 min   | 10 %       |
| Boil                | Mandarina Bavaria | 30 g   | 30 min   | 10 %       |
| Boil                | Sorachi Ace       | 20 g   | 20 min   | 10 %       |
| Boil                | Mandarina Bavaria | 20 g   | 20 min   | 10 %       |
| Aroma (end of boil) | Sorachi Ace       | 20 g   | 10 min   | 10 %       |
| Aroma (end of boil) | Mandarina Bavaria | 20 g   | 10 min   | 10 %       |
| Aroma (end of boil) | Mandarina Bavaria | 20 g   | 5 min    | 10 %       |
| Aroma (end of boil) | Sorachi Ace       | 20 g   | 5 min    | 10 %       |
| Dry Hop             | Sorachi Ace       | 60 g   | 4 day(s) | 10 %       |
| Dry Hop             | Mandarina Bavaria | 60 g   | 4 day(s) | 10 %       |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 10 g   | ---        |