

# Johny Chmielony (West Coast IPA)

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **93**
- SRM **4.6**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name            | Amount         | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Pilzneński      | 3.5 kg (58.3%) | 81 %  | 4   |
| Grain | Castle Pale Ale | 2 kg (33.3%)   | 80 %  | 8   |
| Grain | Przeniczne      | 0.5 kg (8.3%)  | 83 %  | 4.5 |

## Hops

| Use for                 | Name     | Amount | Time   | Alpha acid |
|-------------------------|----------|--------|--------|------------|
| Boil                    | Citra    | 15 g   | 20 min | 12 %       |
| Boil                    | Amarillo | 15 g   | 20 min | 9.5 %      |
| Boil                    | Simcoe   | 15 g   | 20 min | 13.2 %     |
| Boil                    | Citra    | 15 g   | 5 min  | 12 %       |
| Boil                    | Amarillo | 15 g   | 5 min  | 9.5 %      |
| Boil                    | Simcoe   | 15 g   | 5 min  | 13.2 %     |
| Boil                    | Citra    | 15 g   | 0 min  | 12 %       |
| Boil                    | Amarillo | 15 g   | 0 min  | 9.5 %      |
| Boil                    | Simcoe   | 15 g   | 0 min  | 13.2 %     |
| Aroma (end of boil)     | Citra    | 15 g   | 85 min | 12 %       |
| dodać przy 85 stopniach |          |        |        |            |

|                         |          |      |          |        |
|-------------------------|----------|------|----------|--------|
| Aroma (end of boil)     | Amarillo | 15 g | 85 min   | 9.5 %  |
| dodać przy 85 stopniach |          |      |          |        |
| Aroma (end of boil)     | Simcoe   | 15 g | 85 min   | 13.2 % |
| dodać przy 85 stopniach |          |      |          |        |
| Dry Hop                 | Citra    | 40 g | 4 day(s) | 12 %   |
| Dry Hop                 | Amarillo | 40 g | 4 day(s) | 9.5 %  |
| Dry Hop                 | Simcoe   | 40 g | 4 day(s) | 13.2 % |

## Yeasts

| Name            | Type | Form  | Amount | Laboratory       |
|-----------------|------|-------|--------|------------------|
| FM53 Voss kveik | Ale  | Slant | 20 ml  | Fermentum Mobile |