

# Columbo

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **45**
- SRM **8.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt       | 2 kg (57.1%)   | 80 %  | 5   |
| Grain | Honey Malt                 | 0.5 kg (14.3%) | 80 %  | 15  |
| Grain | Strzegom Monachijski typ I | 0.5 kg (14.3%) | 79 %  | 16  |
| Grain | Strzegom Karmel 200        | 0.1 kg (2.9%)  | 75 %  | 200 |
| Grain | Płatki owsiane             | 0.4 kg (11.4%) | 85 %  | 3   |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | marynka  | 20 g   | 60 min   | 8.5 %      |
| Boil    | Citra    | 15 g   | 10 min   | 12 %       |
| Boil    | Amarillo | 10 g   | 10 min   | 7.5 %      |
| Dry Hop | Citra    | 15 g   | 3 day(s) | 12 %       |
| Dry Hop | Amarillo | 10 g   | 3 day(s) | 7.5 %      |

## Yeasts

| Name        | Type | Form   | Amount | Laboratory |
|-------------|------|--------|--------|------------|
| wyeast 1450 | Ale  | Liquid | 500 ml | wyeast     |

## Extras

| Type        | Name            | Amount | Use for | Time   |
|-------------|-----------------|--------|---------|--------|
| Water Agent | gips piwowarski | 5 g    | Boil    | 60 min |
| Fining      | mech irlandzki  | 5 g    | Boil    | 10 min |