

# Imperial IPA

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **74**
- SRM **7.7**
- Style **Imperial 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 **24.9 liter(s)**
- Total mash volume **33.2 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **24.9 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield  | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 4 kg (43%)     | 80 %   | 5   |
| Grain | Viking Pilsner malt  | 1.2 kg (12.9%) | 82 %   | 4   |
| Grain | Strzegom Wiedeński   | 1 kg (10.8%)   | 79 %   | 10  |
| Grain | Caragold             | 0.3 kg (3.2%)  | 75 %   | 120 |
| Grain | Płatki owsiane       | 0.5 kg (5.4%)  | 60 %   | 3   |
| Sugar | Candi Sugar, Clear   | 1 kg (10.8%)   | 78.3 % | 2   |
| Grain | Pszeniczny           | 1 kg (10.8%)   | 85 %   | 4   |
| Grain | Bestmalz Red X       | 0.3 kg (3.2%)  | 79 %   | 40  |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Magnat                 | 25 g   | 60 min | 11.2 %     |
| Boil    | Columbus/Tomahawk/Zeus | 25 g   | 40 min | 15.5 %     |
| Boil    | Denali                 | 20 g   | 20 min | 14 %       |
| Boil    | Eureka!                | 10 g   | 15 min | 18 %       |
| Boil    | Columbus/Tomahawk/Zeus | 10 g   | 15 min | 15.5 %     |

|                     |                        |      |           |        |
|---------------------|------------------------|------|-----------|--------|
| Boil                | Denali                 | 10 g | 15 min    | 14 %   |
| Aroma (end of boil) | Eureka!                | 10 g | 5 min     | 18 %   |
| Aroma (end of boil) | Columbus/Tomahawk/Zeus | 10 g | 5 min     | 15.5 % |
| Whirlpool           | Denali                 | 20 g | 0 min     | 14 %   |
| Dry Hop             | Denali                 | 50 g | 10 day(s) | 14 %   |
| Dry Hop             | Motueka                | 50 g | 10 day(s) | 7 %    |
| Dry Hop             | Citra                  | 50 g | 10 day(s) | 12 %   |

## Yeasts

| Name                                 | Type | Form  | Amount | Laboratory      |
|--------------------------------------|------|-------|--------|-----------------|
| Mangrove Jack's<br>M44 US West Coast | Ale  | Slant | 100 ml | Mangrove Jack's |