

## Double ipa

---

- Gravity **19.3 BLG**
- ABV **8.4 %**
- IBU **73**
- SRM **7.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.2 liter(s)**
- Total mash volume **32.2 liter(s)**

### Steps

- Temp **68 C**, Time **50 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **24.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **9.9 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

### Fermentables

| Type  | Name                         | Amount         | Yield | EBC |
|-------|------------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt         | 6 kg (74.5%)   | 80 %  | 5   |
| Grain | Płatki owsiane               | 0.8 kg (9.9%)  | 85 %  | 3   |
| Grain | Pszeniczny                   | 0.5 kg (6.2%)  | 85 %  | 4   |
| Grain | Briess - 2 Row Carapils Malt | 0.5 kg (6.2%)  | 75 %  | 3   |
| Grain | Strzegom Karmel 150          | 0.25 kg (3.1%) | 75 %  | 150 |

### Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 40 g   | 45 min | 15.5 %     |
| Boil                | Citra                  | 25 g   | 15 min | 12 %       |
| Aroma (end of boil) | Nelson Sauvín          | 30 g   | 1 min  | 11 %       |
| Boil                | Mosaic                 | 20 g   | 30 min | 10 %       |

### Yeasts

| Name  | Type | Form  | Amount | Laboratory |
|-------|------|-------|--------|------------|
| Us 05 | Ale  | Slant | 200 ml | ---        |

### Extras

| Type        | Name            | Amount | Use for | Time |
|-------------|-----------------|--------|---------|------|
| Water Agent | Gips piwowarski | 4 g    | Mash    | ---  |