

## Double Ipa - 23-09-2020

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **103**
- SRM **9.6**
- Style **Imperial IPA**

### Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **5 %**
- Size with trub loss **40.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **31.3 liter(s)**
- Total mash volume **43.8 liter(s)**

### Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **4 min**

### Mash step by step

- Heat up **31.3 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **4 min** at **76C**
- Sparge using **30 liter(s)** of **76C** water or to achieve **48.8 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Pilzneński          | 10 kg (74.1%)  | 81 %  | 4   |
| Grain | Pszeniczny          | 1.5 kg (11.1%) | 85 %  | 4   |
| Sugar | cukier              | 1 kg (7.4%)    | --- % | --- |
| Grain | Strzegom Karmel 150 | 1 kg (7.4%)    | 75 %  | 150 |

### Hops

| Use for | Name                   | Amount | Time     | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil    | magnum                 | 60 g   | 60 min   | 14.5 %     |
| Boil    | Columbus/Tomahawk/Zeus | 50 g   | 30 min   | 15.6 %     |
| Boil    | Chinook                | 50 g   | 15 min   | 13.8 %     |
| Boil    | Citra                  | 50 g   | 15 min   | 12.3 %     |
| Boil    | Centennial             | 50 g   | 5 min    | 11.2 %     |
| Dry Hop | Centennial             | 50 g   | 2 day(s) | 10.5 %     |
| Dry Hop | Chinook                | 100 g  | 2 day(s) | 13 %       |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|       |     |       |        |     |
|-------|-----|-------|--------|-----|
| US-05 | Ale | Slant | 200 ml | --- |
|-------|-----|-------|--------|-----|

## Notes

- Wyszło 17 blg przy 21 litrach do nastawienia.  
2x chłodzenie wymiennikiem - 17,8 stopni - zadano gęstwę  
2x wyszło przez rurkę  
Fermentacja od 16 stopni  
W 4 dzień zwiększyłem do 18  
*Oct 31, 2019, 8:14 AM*