

## #117 Double IPA

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **60**
- SRM **4.8**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **4 %**
- Size with trub loss **18.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **14 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.7 liter(s)**

### Steps

- Temp **65 C**, Time **65 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **22.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **65 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Strzegom Pilzneński  | 5.15 kg (82.7%) | 80 %  | 4   |
| Grain | Pszeniczny           | 0.88 kg (14.1%) | 85 %  | 4   |
| Grain | Weyermann - Carapils | 0.2 kg (3.2%)   | 78 %  | 4   |

### Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Citra                  | 8 g    | 50 min   | 12.8 %     |
| Boil                | Chinook                | 14.8 g | 50 min   | 12.8 %     |
| Boil                | lunga PL               | 6.7 g  | 50 min   | 10 %       |
| Aroma (end of boil) | Simcoe                 | 11 g   | 12 min   | 12.9 %     |
| Aroma (end of boil) | Galaxy                 | 15 g   | 12 min   | 14.2 %     |
| Whirlpool           | Columbus/Tomahawk/Zeus | 32.5 g | 2 min    | 16.5 %     |
| Whirlpool           | Enigma (AUS)           | 32.5 g | 2 min    | 16.5 %     |
| Whirlpool           | Sabro                  | 30 g   | 2 min    | 15 %       |
| Dry Hop             | Enigma (AUS)           | 57 g   | 3 day(s) | 16.5 %     |
| Dry Hop             | Columbus/Tomahawk/Zeus | 29 g   | 3 day(s) | 16.5 %     |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale  | Slant | 120 ml | Danstar    |

## Extras

| Type   | Name       | Amount | Use for   | Time     |
|--------|------------|--------|-----------|----------|
| Fining | WhirlFloc  | 2.5 g  | Boil      | 12 min   |
| Other  | Witamina C | 3.6 g  | Secondary | 3 day(s) |