

## Black IPA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **74**
- SRM **33.4**

### Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **18 liter(s)**

### Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **24 liter(s)**

### Fermentables

| Type  | Name                             | Amount         | Yield  | EBC  |
|-------|----------------------------------|----------------|--------|------|
| Grain | Weyermann - Pale Ale Malt        | 1.5 kg (37.5%) | 85 %   | 7    |
| Grain | Pilzneński                       | 0.5 kg (12.5%) | 81 %   | 4    |
| Grain | Pszeniczny                       | 0.5 kg (12.5%) | 85 %   | 4    |
| Grain | Castle Cafe                      | 0.5 kg (12.5%) | 75.5 % | 250  |
| Grain | Brown Malt (British Chocolate)   | 0.5 kg (12.5%) | 70 %   | 175  |
| Grain | Crystal Malt                     | 0.25 kg (6.3%) | 75 %   | 95   |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.25 kg (6.3%) | 73 %   | 1001 |

### Hops

| Use for   | Name   | Amount | Time     | Alpha acid |
|-----------|--------|--------|----------|------------|
| Boil      | Galaxy | 20 g   | 20 min   | 15 %       |
| Whirlpool | Galaxy | 80 g   | 20 min   | 15 %       |
| Dry Hop   | Simcoe | 100 g  | 3 day(s) | 13.2 %     |

### Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US 05 | Ale  | Dry  | 11 g   | Fermentis  |

### Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Fining      | mech irlandzki | 10 g   | Boil    | 10 min |
| Water Agent | Kwas fosforowy | 3 g    | Boil    | 1 min  |