

# Black IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **79**
- SRM **27.5**
- Style **Black 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

## Fermentables

| Type  | Name                            | Amount        | Yield | EBC  |
|-------|---------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt            | 5 kg (66.7%)  | 80 %  | 5    |
| Grain | Strzegom Monachijski typ II     | 1 kg (13.3%)  | 79 %  | 22   |
| Grain | Jęczmień niesłodowany           | 0.4 kg (5.3%) | 75 %  | 2    |
| Grain | Pszeniczny                      | 0.5 kg (6.7%) | 85 %  | 4    |
| Grain | Weyermann - Dehusked Carafo III | 0.5 kg (6.7%) | 70 %  | 1024 |
| Grain | Jęczmień palony                 | 0.1 kg (1.3%) | 55 %  | 985  |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 30 g   | 60 min | 16 %       |
| Boil                | Simcoe                 | 10 g   | 30 min | 13.2 %     |
| Boil                | Citra                  | 10 g   | 30 min | 12 %       |
| Boil                | Mosaic                 | 10 g   | 30 min | 10 %       |
| Boil                | Simcoe                 | 15 g   | 15 min | 13.2 %     |
| Boil                | Citra                  | 15 g   | 15 min | 12 %       |
| Boil                | Mosaic                 | 15 g   | 15 min | 10 %       |
| Aroma (end of boil) | Simcoe                 | 15 g   | 1 min  | 13.2 %     |
| Aroma (end of boil) | Citra                  | 15 g   | 1 min  | 12 %       |
| Aroma (end of boil) | Mosaic                 | 15 g   | 1 min  | 10 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |