

# Black IPA

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **51**
- SRM **33.2**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Strzegom Karmel 150         | 0.3 kg (3.8%) | 75 %  | 150  |
| Grain | Jęczmień niesłodowany       | 0.2 kg (2.5%) | 75 %  | 2    |
| Grain | Płatki owsiane              | 0.3 kg (3.8%) | 85 %  | 3    |
| Grain | Żytni                       | 0.2 kg (2.5%) | 85 %  | 8    |
| Grain | Strzegom Czekoladowy jasny  | 0.4 kg (5.1%) | 68 %  | 400  |
| Grain | Viking Pale Ale malt        | 6 kg (75.9%)  | 80 %  | 5    |
| Grain | Strzegom Czekoladowy ciemny | 0.5 kg (6.3%) | 68 %  | 1200 |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | lunga    | 10 g   | 60 min   | 11 %       |
| Boil                | vital    | 30 g   | 60 min   | 12.71 %    |
| Aroma (end of boil) | vital    | 20 g   | 5 min    | 12.71 %    |
| Whirlpool           | Amarillo | 30 g   | 15 min   | 9.5 %      |
| Whirlpool           | Citra    | 20 g   | 15 min   | 12 %       |
| Dry Hop             | Amarillo | 50 g   | 7 day(s) | 9.5 %      |
| Dry Hop             | Citra    | 50 g   | 7 day(s) | 12 %       |

## Yeasts

| Name         | Type | Form  | Amount  | Laboratory |
|--------------|------|-------|---------|------------|
| Safale US-05 | Ale  | Slant | 1000 ml | Fermentis  |