

## Black IPA (mrok) 39

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **79**
- SRM **48.8**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **0 %**
- Size with trub loss **12.4 liter(s)**
- Boil time **45 min**
- Evaporation rate **12 %/h**
- Boil size **15.5 liter(s)**

### Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.3 liter(s)**
- Total mash volume **13.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **10.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

### Fermentables

| Type  | Name                           | Amount          | Yield   | EBC  |
|-------|--------------------------------|-----------------|---------|------|
| Grain | BEST Pale Ale (BESTMALZ)       | 2.18 kg (63.4%) | 82.8 %  | 15   |
| Grain | Viking Wheat Malt              | 0.97 kg (28.2%) | 84 %    | 15   |
| Grain | Carafa Special III (Weyermann) | 0.17 kg (4.9%)  | 75.74 % | 2469 |
| Grain | Chocolate Wheat (Weyermann)    | 0.12 kg (3.5%)  | 75.74 % | 2180 |

### Hops

| Use for             | Name                | Amount | Time   | Alpha acid |
|---------------------|---------------------|--------|--------|------------|
| Boil                | Columbus (Tomahawk) | 15 g   | 45 min | 14 %       |
| Boil                | Citra               | 30 g   | 20 min | 12 %       |
| Boil                | Simcoe              | 15 g   | 7 min  | 13 %       |
| Aroma (end of boil) | Amarillo            | 15 g   | 0 min  | 9.2 %      |

### Yeasts

| Name            | Type | Form   | Amount | Laboratory       |
|-----------------|------|--------|--------|------------------|
| FM53 Voss Kveik | Ale  | Liquid | 100 ml | Fermentum Mobile |

### Extras

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Type        | Name                     | Amount | Use for | Time   |
|-------------|--------------------------|--------|---------|--------|
| Water Agent | Siarczan Magnezu (MgSO4) | 4.18 g | Mash    | 60 min |
| Water Agent | Phosphoric Acid 85%      | 3 g    | Mash    | 60 min |
| Water Agent | Gips (Calcium Sulfate)   | 1.76 g | Mash    | 60 min |
| Water Agent | Sól                      | 0.19 g | Mash    | 60 min |
| Water Agent | Siarczan Magnezu (MgSO4) | 4.64 g | Mash    | 60 min |
| Water Agent | Gips (Calcium Sulfate)   | 1.96 g | Mash    | 60 min |
| Water Agent | Sól                      | 0.22 g | Mash    | 60 min |