

## Black IPA - Mosaic & Amarillo

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **52**
- SRM **29.1**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **26.3 liter(s)**
- Total mash volume **33.8 liter(s)**

### Steps

- Temp **61 C**, Time **60 min**
- Temp **70 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **26.3 liter(s)** of strike water to **66.8C**
- Add grains
- Keep mash **60 min** at **61C**
- Keep mash **20 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                           | Amount        | Yield | EBC  |
|-------|--------------------------------|---------------|-------|------|
| Grain | Pilzneński                     | 6 kg (77.9%)  | 81 %  | 4    |
| Grain | Carafa III special             | 0.5 kg (6.5%) | 70 %  | 1034 |
| Grain | caragold                       | 0.5 kg (6.5%) | 78 %  | 120  |
| Grain | Płatki owsiane /<br>jęczmienne | 0.5 kg (6.5%) | 85 %  | 3    |
| Sugar | cukier brązowy                 | 0.2 kg (2.6%) | --- % | ---  |

### Hops

| Use for             | Name         | Amount | Time     | Alpha acid |
|---------------------|--------------|--------|----------|------------|
| Aroma (end of boil) | Enigma (AUS) | 30 g   | 20 min   | 16.5 %     |
| Dry Hop             | Mosaic       | 30 g   | 7 day(s) | 12.6 %     |
| Dry Hop             | Amarillo     | 30 g   | 7 day(s) | 9.8 %      |
| Boil                | Chinook      | 30 g   | 60 min   | 11.1 %     |
| w 75°C 20min        |              |        |          |            |

### Yeasts

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

## Extras

| Type        | Name            | Amount | Use for | Time   |
|-------------|-----------------|--------|---------|--------|
| Fining      | whirloc         | 1.25 g | Boil    | 15 min |
| Water Agent | gips piwowarski | 4 g    | Mash    | 60 min |
| Flavor      | cukier brązowy  | 200 g  | Boil    | 15 min |