

## #022 IBA v6

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **66**
- SRM **29.5**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **22 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.7 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount        | Yield | EBC  |
|-------|------------------------|---------------|-------|------|
| Grain | Strzegom Pilzniejszy   | 4 kg (71%)    | 80 %  | 4    |
| Grain | Weyermann - Carafa III | 0.5 kg (8.9%) | 70 %  | 1024 |
| Grain | Carahell               | 0.5 kg (8.9%) | 77 %  | 26   |
| Grain | Biscuit Malt           | 0.337 kg (6%) | 79 %  | 45   |
| Sugar | Sugar, Table (Sucrose) | 0.3 kg (5.3%) | 100 % | 2    |

### Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 20 g   | 60 min | 15.1 %     |
| Boil                | Simcoe                 | 20 g   | 30 min | 13.2 %     |
| Aroma (end of boil) | Simcoe                 | 30 g   | 10 min | 13.2 %     |
| Aroma (end of boil) | Simcoe                 | 50 g   | 2 min  | 13.2 %     |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 10 g   | Fermentis  |