

## #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