

#89 Brut IPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **52**
- SRM **3.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **4 %**
- Size with trub loss **12.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **14 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **4.35 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18.5 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **32 min**
- Temp **76 C**, Time **2 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **32 min** at **72C**
- Keep mash **2 min** at **76C**
- Sparge using **3.9 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|--------|-----|
| Grain | BESTMALZ - Best Heidelberg | 2.9 kg (84.1%) | 80.5 % | 3 |
| Grain | Platki owsiane | 0.35 kg (10.1%) | 85 % | 3 |
| Grain | Wheat, Torrified | 0.2 kg (5.8%) | 79 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | lunga | 7 g | 50 min | 11 % |
| Aroma (end of boil) | Citra | 25 g | 6 min | 13.7 % |
| Whirlpool | Citra | 30 g | 10 min | 13.3 % |
| Whirlpool | Simcoe | 21 g | 10 min | 13.7 % |
| Dry Hop | Citra | 55 g | 4 day(s) | 13.3 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|---------------|----------------|-------------|
| Other | Glukoamylaza | 1 g | Mash | 40 min |
| Water Agent | Gips piwowarski | 2 g | Mash | 50 min |
| Water Agent | Chlorek wapnia | 1 g | Mash | 50 min |
| Fining | WhirlFloc | 2.5 g | Boil | 12 min |
| Other | Glukoamylaza | 1 g | Primary | 10 day(s) |