

Endeavour Black IPA

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **41**
- SRM **25.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **4 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **65 min**
- Evaporation rate **8 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **80 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **80 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Crisp Extra Pale Maris Oter | 4 kg (61.5%) | 85 % | 3 |
| Grain | Simpsons - Wheat Malt | 1 kg (15.4%) | 85 % | 4 |
| Grain | Platki owsiane | 0.5 kg (7.7%) | 85 % | 3 |
| Grain | Chateau Wheat Blanc | 0.45 kg (6.9%) | 85 % | 4 |
| Grain | Weyermann - Roasted Barley | 0.3 kg (4.6%) | 80 % | 1200 |
| Grain | Simpsons - Brown cafe | 0.25 kg (3.8%) | 75 % | 500 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|----------|------------|
| Boil | Nugget | 30 g | 60 min | 12.2 % |
| Aroma (end of boil) | Endeavour | 50 g | 5 min | 8 % |
| Dry Hop | Endeavour | 50 g | 2 day(s) | 8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| safale BE134 | Ale | Slant | 200 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | protafloc | 1 g | Boil | 15 min |