

BLACK IPA 2021

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **66**
- SRM **22.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **30 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.9 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **24.9 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **76C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|---------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 6 kg (84.5%) | 85 % | 7 |
| Grain | Strzegom Pszeniczny | 0.4 kg (5.6%) | 81 % | 6 |
| Grain | Carahell | 0.3 kg (4.2%) | 77 % | 26 |
| Grain | Palony jęczmień Weyermann | 0.4 kg (5.6%) | 1 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| First Wort | lunga | 30 g | 60 min | 9.4 % |
| Boil | Cascade | 15 g | 20 min | 7.8 % |
| Boil | Citra | 15 g | 20 min | 12.9 % |
| Boil | Simcoe | 15 g | 20 min | 14.5 % |
| Boil | Cascade | 15 g | 7 min | 7.8 % |
| Boil | Citra | 15 g | 7 min | 12.9 % |
| Boil | Simcoe | 15 g | 7 min | 14.5 % |
| Boil | mosaic | 15 g | 7 min | 10.5 % |
| Aroma (end of boil) | Cascade | 15 g | 0 min | 7.8 % |
| Aroma (end of boil) | citra | 20 g | 0 min | 13.2 % |

| | | | | |
|---------------------|---------|------|----------|--------|
| Aroma (end of boil) | Simcoe | 20 g | 0 min | 14.5 % |
| Aroma (end of boil) | Cascade | 30 g | 0 min | 7.8 % |
| Aroma (end of boil) | mosaic | 20 g | 0 min | 10.5 % |
| Dry Hop | citra | 30 g | 4 day(s) | 13.2 % |
| Dry Hop | mosaic | 30 g | 4 day(s) | 10.5 % |
| Dry Hop | Simcoe | 30 g | 4 day(s) | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------|------|-------|--------|------------|
| us - 05 | Ale | Slant | 200 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|---------|--------|
| Fining | whirlfloc t | 1 g | Boil | 10 min |