

BLACK IPA/CDA v7 #101

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **59**
- SRM **29.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20.6 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **14 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **81.7 %**
- Liquor-to-grist ratio **3.45 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **7 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **73.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **7 min** at **76C**
- Sparge using **12.4 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--|----------------|--------|------|
| Grain | Mep©Ale | 4.2 kg (72.4%) | 82.1 % | 5.5 |
| Grain | Bestmalz - pszeniczny | 0.4 kg (6.9%) | 83 % | 5 |
| Grain | Viking - monachijski II | 0.5 kg (8.6%) | 79 % | 22 |
| Grain | Chateau - Cara gold | 0.25 kg (4.3%) | 75 % | 120 |
| Grain | Weyermann - Carafa II Special | 0.25 kg (4.3%) | 65 % | 1150 |
| Grain | Fawcett - czekoladowy pszeniczny | 0.2 kg (3.4%) | 72.7 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Warrior | 30 g | 60 min | 14.7 % |
| Aroma (end of boil) | Simcoe | 30 g | 10 min | 13.2 % |
| Aroma (end of boil) | Citra | 20 g | 1 min | 13.5 % |
| Aroma (end of boil) | Cascade US | 30 g | 1 min | 7.1 % |
| Dry Hop | Simcoe | 30 g | 3 day(s) | 13.2 % |

| | | | | |
|---------|------------|------|----------|--------|
| Dry Hop | Citra | 20 g | 3 day(s) | 13.5 % |
| Dry Hop | Cascade US | 50 g | 3 day(s) | 7.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 190 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------------|--------|---------|-------|
| Water Agent | Gips | 2 g | Mash | --- |
| Water Agent | kwas mlekowy 80% [ml] | 3.03 g | Mash | --- |
| Water Agent | chlorek wapnia [ml] | 1.72 g | Mash | --- |
| Water Agent | węglan wapnia/kreda | 7 g | Mash | --- |
| Water Agent | sól epsom | 1.5 g | Mash | --- |
| Fining | irish moss | 3 g | Boil | 5 min |