

# BLACK IPA/CDA v6 #87

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **62**
- SRM **31**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **26.3 liter(s)**

## Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **3.17 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.3 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **75 C**, Time **7 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **73.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **7 min** at **75C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **26.3 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount          | Yield  | EBC  |
|-------|-------------------------------|-----------------|--------|------|
| Grain | Viking - pilzneński           | 1 kg (15.9%)    | 80 %   | 4    |
| Grain | Mep©Ale                       | 4.5 kg (71.5%)  | 82.1 % | 5.5  |
| Grain | Weyermann - Abbey             | 0.04 kg (0.6%)  | 75 %   | 45   |
| Grain | Chateau - Cara gold           | 0.29 kg (4.6%)  | 75 %   | 120  |
| Grain | Chateau - Crystal             | 0.016 kg (0.3%) | 78 %   | 150  |
| Grain | Weyermann - Carafa II Special | 0.45 kg (7.1%)  | 65 %   | 1150 |

## Hops

| Use for   | Name              | Amount | Time     | Alpha acid |
|---|-------------------|--------|----------|------------|
| Boil  | Warrior           | 19.5 g | 60 min   | 14.7 %     |
| Boil  | Columbus          | 25 g   | 15 min   | 12.4 %     |
| Aroma (end of boil)                                     | Simcoe            | 25 g   | 10 min   | 13.2 %     |
| Aroma (end of boil)                                     | Mosaic            | 25 g   | 5 min    | 10.4 %     |
| Aroma (end of boil)                                     | Sybilla (szyszka) | 30 g   | 5 min    | 6.5 %      |
| 120 gr mokrej szyszki mrożonej, ekwiwalent 30 gr suchej |                   |        |          |            |
| Dry Hop   | Cascade US        | 30 g   | 3 day(s) | 6.9 %      |

|         |        |      |          |        |
|---------|--------|------|----------|--------|
| Dry Hop | Mosaic | 30 g | 3 day(s) | 10.4 % |
| Dry Hop | Simcoe | 30 g | 3 day(s) | 13.2 % |

## Yeasts

| Name                        | Type | Form  | Amount | Laboratory       |
|-----------------------------|------|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale  | Slant | 150 ml | Fermentum Mobile |
| 2-dniowa gęstwa             |      |       |        |                  |

## 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 | chlerek 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 |