

CDAction

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **68**
- SRM **18.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|----------------|--------|------|
| Grain | BESTMALZ - Best Pilsen | 4.7 kg (78.3%) | 80.5 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.6 kg (10%) | 79 % | 22 |
| Grain | Weyermann - Carapils | 0.25 kg (4.2%) | 78 % | 4 |
| Grain | Strzegom Karmel 150 | 0.25 kg (4.2%) | 75 % | 150 |
| Grain | Weyermann - Dehusked Carafa III | 0.2 kg (3.3%) | 70 % | 1024 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------|--------|----------|------------|
| Boil | Iunga | 15 g | 60 min | 11 % |
| Boil | Chinook | 25 g | 30 min | 12 % |
| Boil | Cascade | 35 g | 15 min | 6 % |
| Whirlpool | Sabro | 40 g | 10 min | 14 % |
| Whirlpool | Cascade | 35 g | 10 min | 6 % |
| Whirlpool | Amarillo | 30 g | 10 min | 11 % |
| Dry Hop | Sabro | 60 g | 1 day(s) | 14 % |
| Dry Hop | Cascade | 30 g | 1 day(s) | 6 % |

| | | | | |
|---------|----------|------|----------|------|
| Dry Hop | Amarillo | 70 g | 1 day(s) | 11 % |
|---------|----------|------|----------|------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------------|------|-------|--------|------------|
| WLP001 - California Ale Yeast | Ale | Slant | 150 ml | White Labs |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|-------|
| Fining | whirflock | 1 g | Boil | 7 min |