

Blak pIPA

- Gravity **15 BLG**
- ABV ---
- IBU **67**
- SRM **32**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **21.4 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **2 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|----------------|-------|------|
| Grain | Pilzneński | 4 kg (73.4%) | 81 % | 4 |
| Grain | Carahell | 0.25 kg (4.6%) | 77 % | 26 |
| Grain | kawowy | 0.5 kg (9.2%) | 74 % | 250 |
| Grain | Carafa III | 0.3 kg (5.5%) | 70 % | 1034 |
| Grain | Caraaroma | 0.3 kg (5.5%) | 78 % | 400 |
| Sugar | Candi Sugar, Clear | 0.1 kg (1.8%) | 100 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Bravo | 25 g | 60 min | 15.5 % |
| Boil | Willamette | 25 g | 25 min | 5 % |
| Boil | Amarillo | 10 g | 25 min | 9.5 % |
| Boil | Amarillo | 10 g | 10 min | 9.5 % |
| Boil | Willamette | 20 g | 10 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--|-----|-----|------|-----|
| Mangrove Jack's M42 New World Strong Ale | Ale | Dry | 10 g | --- |
|--|-----|-----|------|-----|