

6# black IPA 18blg

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **90**
- SRM **31.8**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **23.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **66 C**, Time **80 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **80 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **23.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 5.4 kg (73%) | 80 % | 5 |
| Grain | Monachijski Ciemny Steinbach | 0.5 kg (6.8%) | 100 % | 30 |
| Grain | Monachijski Ciemny Steinbach | 0.2 kg (2.7%) | 100 % | 100 |
| Grain | Weyermann - Carafa II | 0.3 kg (4.1%) | 70 % | 1100 |
| Grain | Strzegom pszenica prażona | 0.2 kg (2.7%) | 70 % | 1000 |
| Grain | Płatki pszeniczne | 0.4 kg (5.4%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.4 kg (5.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 35 g | 90 min | 16.8 % |
| Boil | Columbus/Tomahawk/Zeus | 20 g | 60 min | 15.1 % |
| Aroma (end of boil) | Cascade | 20 g | 5 min | 9 % |
| Aroma (end of boil) | Centennial | 20 g | 1 min | 8.3 % |
| Dry Hop | Ahtanum | 25 g | 7 day(s) | 3.6 % |
| Dry Hop | Cascade | 20 g | 5 day(s) | 9 % |

| | | | | |
|---------|------------|------|----------|--------|
| Dry Hop | Centennial | 10 g | 4 day(s) | 8.3 % |
| Dry Hop | Simcoe | 20 g | 3 day(s) | 11.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------|
| Danstar - Nottingham | Ale | Slant | 500 ml | Danstar |