

Black IPA

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **55**
- SRM **42.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **29.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **1 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-------------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 6 kg (75.5%) | 80 % | 5 |
| Grain | Słód pszeniczny Bestmalz | 0.5 kg (6.3%) | 82 % | 5 |
| Grain | Słód Czekoladowy ciemny Viking Malt | 0.5 kg (6.3%) | 68 % | 1200 |
| Grain | Extra black | 0.3 kg (3.8%) | 65 % | 1350 |
| Adjunct | Płatki jęczmienne | 0.65 kg (8.2%) | 50 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | lunga | 30 g | 60 min | 10.3 % |
| Boil | Chinook | 30 g | 30 min | 11.4 % |
| Aroma (end of boil) | Challenger | 30 g | 10 min | 6.1 % |
| Dry Hop | Fuggles | 30 g | 3 day(s) | 4.4 % |
| Dry Hop | Citra | 50 g | 3 day(s) | 12.9 % |
| Dry Hop | Amarillo | 30 g | 3 day(s) | 7.7 % |

Yeasts

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

| | | | | |
|-------|-----|-----|------|-----|
| US-05 | Ale | Dry | 23 g | --- |
|-------|-----|-----|------|-----|