

Black Vermont IPA

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **73**
- SRM **9.8**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 1 kg (22.2%) | 80 % | 5 |
| Grain | Słód Pilsner® 2,5-4,5 EBC Weyermann | 1 kg (22.2%) | 80 % | 4 |
| Grain | Słód karmelowy monach. Caramunich® typ III Weyermann | 0.5 kg (11.1%) | 76 % | 150 |
| Grain | Płatki pszeniczne | 0.5 kg (11.1%) | 85 % | 3 |
| Grain | Viking Pilsner malt | 1 kg (22.2%) | 82 % | 4 |
| Grain | Płatki owsiane | 0.5 kg (11.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Citra | 20 g | 60 min | 12 % |
| Boil | Cascade | 20 g | 45 min | 6 % |
| Boil | Amarillo | 20 g | 30 min | 9.5 % |
| Aroma (end of boil) | Citra | 20 g | 10 min | 12 % |
| Dry Hop | Citra | 20 g | 5 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 10 g | --- |