

Black Buck

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **25**
- SRM **16.4**
- Style **Traditional Bock**

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 **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt | 1 kg (16.4%) | 82 % | 4 |
| Grain | Strzegom Monachijski typ I | 1.5 kg (24.6%) | 79 % | 16 |
| Grain | Strzegom Monachijski typ II | 0 kg | 79 % | 22 |
| Grain | Weyermann - Vienna Malt | 2 kg (32.8%) | 81 % | 8 |
| Grain | Viking melanoidynowy | 1.5 kg (24.6%) | 75 % | 60 |
| Grain | Jęczmień palony | 0.1 kg (1.6%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Sovereign | 10 g | 60 min | 4.1 % |
| Boil | Fuggles | 30 g | 60 min | 4.5 % |
| Boil | Sovereign | 50 g | 10 min | 4.1 % |

Yeasts

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

| | | | | |
|----------------|-------|-----|-------|-----------|
| Saflager S-189 | Lager | Dry | 9.2 g | Fermentis |
|----------------|-------|-----|-------|-----------|