

# 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
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Saflager S-189	Lager	Dry	9.2 g	Fermentis
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