

# Bock

- Gravity **17.7 BLG**
- ABV ---
- IBU **25**
- SRM **21.6**
- 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 **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	1.5 kg (22.7%)	80 %	4
Grain	Viking Pale Ale malt	1 kg (15.2%)	80 %	5
Grain	Monachijski	3 kg (45.5%)	80 %	16
Grain	Special B Castle	0.3 kg (4.5%)	70 %	350
Grain	Weyermann - Melanoiden Malt	0.4 kg (6.1%)	81 %	53
Grain	Biscuit Malt	0.4 kg (6.1%)	79 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10.5 %
Boil	Hallertau	40 g	5 min	5.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - Urquell	Lager	Slant	200 ml	Wyeast Labs