

Bock beta-0.2

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **25**
- SRM **14.5**
- Style **Doppelbock**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **29.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **64 C**, Time **15 min**
- Temp **73 C**, Time **45 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **24.5 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **15 min** at **64C**
- Keep mash **45 min** at **73C**
- Keep mash **0 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg (50%)	80 %	4
Grain	Strzegom Monachijski typ I	2.6 kg (37.1%)	79 %	16
Grain	Karmelowy Czerwony	0.3 kg (4.3%)	75 %	59
Grain	Caraaroma	0.3 kg (4.3%)	78 %	400
Grain	Carahell	0.3 kg (4.3%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnanger	85 g	90 min	3 %
Boil	Tettnanger	15 g	10 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	23 g	Fermentis Division of S.I.Lesaffre

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	3 g	Boil	10 min