

# Trykające koziołki

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **24**
- SRM **19.3**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **14.6 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **20 min**

## Mash step by step

- Heat up **11 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneńsk Weyerman	1 kg (27.3%)	81 %	4
Grain	Monachijski	1 kg (27.3%)	80 %	16
Grain	Strzegom Wiedeński	1 kg (27.3%)	79 %	10
Grain	Viking melanoidynowy	0.33 kg (9%)	75 %	60
Grain	Strzegom Karmel 300	0.33 kg (9%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	60 min	8.7 %
Boil	Lublin (Lubelski)	10 g	5 min	2.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	150 ml	Fermentis