

# Derkacz - Koźlak

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **26**
- SRM **15.9**
- 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 **120 min**
- Evaporation rate **20 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	1 kg (15.4%)	81 %	5
Grain	Monachijski	5 kg (76.9%)	80 %	16
Grain	Caraaroma	0.25 kg (3.8%)	78 %	400
Grain	Weyermann Caramunich 3	0.25 kg (3.8%)	76 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	15 g	60 min	9.5 %
Boil	Magnat	15 g	20 min	9.8 %
Aroma (end of boil)	Magnat	10 g	10 min	9.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Slant	200 ml	Fermentum Mobile