

# Kozel Karminowy

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **19**
- SRM **8.4**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **17 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	3 kg (50%)	79 %	22
Grain	Strzegom Wiedeński	3 kg (50%)	79 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	8.8 %
Boil	Tettnang	15 g	15 min	3.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
wyeast munich lager	Lager	Slant	100 ml	---

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	15 min