

# Monachijskie Ciemne

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **9.1**
- Style **Munich Dunkel**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **53 C**, Time **10 min**
- Temp **64 C**, Time **60 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **60 min** at **64C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski typ II 20-25 EBC Weyermann	5 kg (100%)	80 %	20

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	12 g	60 min	13.5 %
Boil	Hallertau Mittelfruh	20 g	10 min	4.6 %
Whirlpool	Hallertau Mittelfruh	30 g	10 min	4.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lallemand - Diamond Lager	Ale	Slant	100 ml	Lallemand