

# Kolsh na marynce

- Gravity **11.9 BLG**
- ABV ---
- IBU **47**
- SRM **3.5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **38.9 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **52 C**, Time **20 min**
- Temp **63 C**, Time **60 min**
- Temp **73 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **60 min** at **63C**
- Keep mash **20 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **26.9 liter(s)** of **76C** water or to achieve **38.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4 kg (66.7%)	82 %	4
Grain	Strzegom Pszeniczny	2 kg (33.3%)	81 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	9 %
Boil	Marynka	30 g	30 min	9 %
Boil	Marynka	30 g	15 min	9 %
Aroma (end of boil)	Marynka	30 g	0 min	9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	6 g	Boil	20 min
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