

# cos ala kolsh, rozgrzewka drozdzy na RISa

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **31**
- SRM **2.9**
- Style **Kölsch**

## 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **65 C**, Time **90 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- 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	Briess - Pilsen Malt	4 kg (80%)	80.5 %	2
Grain	Briess - Wheat Malt, White	1 kg (20%)	85 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %
Boil	Lublin (Lubelski)	20 g	15 min	3.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	safale

## Notes

- Fermentacja w 14-16 stopniach a nastepnie lagerowanie przez jakis miesiac.  
*Feb 4, 2018, 2:31 PM*