Koelsch

- Gravity 11.9 BLG
- ABV 4.8 %
- IBU **21**
- SRM **3.9**
- Style Kölsch

Batch size

- Expected quantity of finished beer 11 liter(s)
- Trub loss 5 %
- Size with trub loss 11.6 liter(s)
- · Boil time 60 min
- Evaporation rate 10 %/h
- Boil size 14 liter(s)

Mash information

- Mash efficiency 65 %
- Liquor-to-grist ratio 3 liter(s) / kg
- Mash size 9 liter(s)
- Total mash volume 12 liter(s)

Steps

- Temp **64 C**, Time **45 min** Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up 9 liter(s) of strike water to 71.3C
- Add grains
- Keep mash 45 min at 64C
- Keep mash 15 min at 72C
- Keep mash 5 min at 78C
- Sparge using 8 liter(s) of 76C water or to achieve 14 liter(s) of wort

Fermentables

Туре	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.7 kg (90%)	80 %	4
Grain	Weyermann pszeniczny jasny	0.2 kg <i>(6.7%)</i>	80 %	6
Grain	Weyermann - Acidulated Malt	0.1 kg (3.3%)	%	

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertauer Magnum	7 g	40 min	11.7 %
Boil	Tettnanger	20 g	15 min	3.3 %

Yeasts

Name	Туре	Form	Amount	Laboratory
FM42 Stare nadreńskie	Ale	Liquid	30 ml	

Extras

Туре	Name	Amount	Use for	Time
Other	Łuska ryżowa	100 g	Mash	10 min

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