

## Koelsch #3 - duze gary

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- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **15**
- SRM **3.3**
- Style **Kölsch**

### Batch size

- Expected quantity of finished beer **500 liter(s)**
- Trub loss **2 %**
- Size with trub loss **510 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **588 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **300 liter(s)**
- Total mash volume **400 liter(s)**

### Steps

- Temp **52 C**, Time **20 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **300 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **388 liter(s)** of **76C** water or to achieve **588 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	75 kg (75%)	80 %	4
Grain	Słód pszeniczny	25 kg (25%)	82 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	100 g	60 min	8 %
Boil	Premiant	400 g	30 min	8 %
Whirlpool	Strata	500 g	0 min	13.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	250 g	Fermentis