

Kara Mustafa

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **22**
- SRM **8.2**
- Style **Vienna Lager**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **32.4 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.9 liter(s)**

Steps

- Temp **54 C**, Time **10 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **10 min** at **54C**
- Keep mash **40 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **32.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Vienna Malt	3.5 kg (60.9%)	81 %	8
Grain	Weyermann - Light Munich Malt	1.7 kg (29.6%)	82 %	14
Grain	Caramunich® typ I	0.25 kg (4.3%)	73 %	80
Grain	Weyermann - Cara Crystal	0.2 kg (3.5%)	78 %	150
Grain	wayermann - zakwaszajacy	0.1 kg (1.7%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	40 g	60 min	5 %
Boil	Saaz (Czech Republic)	30 g	20 min	3.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Saflager W 34/70	Lager	Dry	11.5 g	Fermentis
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Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	10 g	Boil	15 min