

# 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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                  |       |     |        |           |
|------------------|-------|-----|--------|-----------|
| Saflager W 34/70 | Lager | Dry | 11.5 g | Fermentis |
|------------------|-------|-----|--------|-----------|

### Extras

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