

# Kara Mustafa

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- Gravity **14.3 BLG**
- ABV ---
- IBU **78**
- SRM **7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **3 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **3 min** at **76C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.5 kg (47.6%)	79 %	6
Grain	Strzegom Pilzneński	2.5 kg (47.6%)	80 %	4
Grain	Karmelowy Czerwony	0.25 kg (4.8%)	75 %	59

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	42 g	60 min	15.5 %
Boil	Cascade	25 g	5 min	6 %
Boil	Cascade	25 g	1 min	6 %
Dry Hop	Cascade	50 g	7 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safeale US-05	Ale	Dry	11 g	Fermentis