

# American Munich Trash #1

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **55**
- SRM **55.9**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **0 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **19.8 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.9 liter(s)**

## Steps

- Temp **64 C**, Time **90 min**
- Temp **75 C**, Time **10 min**

## Mash step by step

- Heat up **10.4 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **12.9 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Munich Malt Light	2.93 kg (84.2%)	78 %	41
Grain	Chocolate Wheat (Weyermann)	0.45 kg (12.9%)	75.74 %	2180
Grain	Karmelowy 30	0.1 kg (2.9%)	72.6 %	79

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	60 min	15.5 %
Boil	Galaxy	10 g	30 min	15.5 %
Boil	Cascade	20 g	15 min	4.5 %
Boil	Citra	20 g	5 min	12 %
Boil	Citra	20 g	0 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale American	Ale	Dry	1 g	DCL/Fermentis