

# American Altbier

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- Gravity **11.7 BLG**
- ABV ---
- IBU **39**
- SRM **13**
- Style **Düsseldorf Altbier**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **65 C**, Time **90 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Soufflet Pale Ale	4 kg (75.5%)	82 %	6.5
Grain	Karmelowy Czerwony	1 kg (18.9%)	75 %	50
Grain	Strzegom Karmel 150	0.3 kg (5.7%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	25 g	60 min	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Safale