

# 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     |