

# American Bitter

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- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **50**
- SRM **5.9**

## 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 **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **2 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount       | Yield | EBC |
|-------|------------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt   | 3.8 kg (95%) | 80 %  | 5   |
| Grain | Strzegom Karmel<br>150 | 0.2 kg (5%)  | 75 %  | 150 |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Apollo  | 15 g   | 60 min | 17 %       |
| Aroma (end of boil) | Cascade | 20 g   | 10 min | 7 %        |
| Aroma (end of boil) | Citra   | 20 g   | 5 min  | 12 %       |
| Aroma (end of boil) | Summit  | 25 g   | 3 min  | 17 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |