

# American Bitter 12 BLG 20I

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **47**
- SRM **7.1**
- Style **American Pale Ale**

## 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 **5 %/h**
- Boil size **23.1 liter(s)**

## Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **23.1 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount       | Yield | EBC |
|-------|-------------------|--------------|-------|-----|
| Grain | Strzegom Pale Ale | 3.8 kg (95%) | 79 %  | 6   |
| Grain | Crystal II 200    | 0.2 kg (5%)  | 71 %  | 200 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Apollo  | 15 g   | 60 min | 17 %       |
| Boil    | Cascade | 20 g   | 10 min | 6 %        |
| Boil    | Citra   | 20 g   | 5 min  | 12 %       |
| Boil    | Summit  | 25 g   | 3 min  | 17 %       |

## Yeasts

| Name | Type | Form  | Amount | Laboratory |
|------|------|-------|--------|------------|
| us05 | Ale  | Slant | 150 ml | Fermentis  |