

American Bitter 2

- Gravity **11 BLG**
- ABV ---
- IBU **18**
- SRM **6.1**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **175 liter(s)**
- Trub loss **1 %**
- Size with trub loss **180.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **189.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **126 liter(s)**
- Total mash volume **157.5 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **68 C**, Time **20 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **3 min**

Mash step by step

- Heat up **126 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **3 min** at **78C**
- Sparge using **94.7 liter(s)** of **76C** water or to achieve **189.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 30 kg (95.2%) | 79 % | 6 |
| Grain | Caramel/Crystal Malt - 10L | 1.5 kg (4.8%) | 75 % | 160 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|----------|------------|
| Boil | Citra | 100 g | 60 min | 12 % |
| Boil | Cascade | 50 g | 2 min | 6 % |
| Boil | Centennial | 50 g | 2 min | 10.5 % |
| Whirlpool | Cascade | 50 g | 2 min | 6 % |
| Whirlpool | Centennial | 50 g | 30 min | 10.5 % |
| Whirlpool | Amarillo | 50 g | 30 min | 9.5 % |
| Whirlpool | Simcoe | 50 g | 30 min | 13.2 % |
| Whirlpool | Mosaic | 50 g | 30 min | 10 % |
| Dry Hop | Amarillo | 50 g | 7 day(s) | 9.5 % |
| Dry Hop | Simcoe | 50 g | 7 day(s) | 13.2 % |

| | | | | |
|---------|--------|------|----------|------|
| Dry Hop | Mosaic | 50 g | 7 day(s) | 10 % |
|---------|--------|------|----------|------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Safale |