

# Mike's Alt

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **43**
- SRM **19.9**
- 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 **80 %**
- Liquor-to-grist ratio **2.6 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16.6 liter(s)**

## Steps

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

## Mash step by step

- Heat up **12 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **24.3 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type           | Name  | Amount         | Yield | EBC  |
|----------------|---|----------------|-------|------|
| Grain          | Carahell  | 3.5 kg (55.6%) | 77 %  | 26   |
| Grain          | Strzegom Karmel 150                                   | 0.5 kg (7.9%)  | 75 %  | 150  |
| Grain          | Weyermann - Caramel Rye Malt                          | 0.5 kg (7.9%)  | 74 %  | 175  |
| Grain          | Weyermann - Carafa III                                | 0.1 kg (1.6%)  | 70 %  | 1024 |
| Liquid Extract | Ekstrakt słodowy Monachijski - Weyermann Munich Amber | 1.7 kg (27%)   | 78 %  | 22   |

## Hops

| Use for | Name        | Amount | Time   | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil    | Challenger  | 30 g   | 60 min | 5.8 %      |
| Boil    | Junga       | 30 g   | 60 min | 10 %       |
| Boil    | Mittelfrueh | 30 g   | 20 min | 2.7 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | Safale     |