

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