

Alt

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **48**
- SRM **11.7**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.4 liter(s)**
- Total mash volume **23.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	2 kg (38.1%)	81 %	4
Grain	Briess - Bonlander Munich Malt	0.5 kg (9.5%)	78 %	20
Grain	Briess - Pale Ale Malt	2.4 kg (45.7%)	80 %	7
Grain	Crystal malt	0.35 kg (6.7%)	--- %	340

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	15.3 %
Aroma (end of boil)	Hallertauer tradition	30 g	0 min	3 %