

Alt #1

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **39**
- SRM **13.1**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **5 %**
- Size with trub loss **583 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **622.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.1 liter(s) / kg**
- Mash size **399.9 liter(s)**
- Total mash volume **528.9 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	50 kg (38.8%)	80 %	4
Grain	Strzegom Monachijski typ II	75 kg (58.1%)	79 %	22
Grain	Caraaroma	3 kg (2.3%)	78 %	400
Grain	Carafa III	1 kg (0.8%)	70 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Apollo	450 g	60 min	17 %
Boil	Hallertau Spalt Select	750 g	20 min	4.1 %
Boil	Hallertau Spalt Select	750 g	2 min	4.1 %