

Alt

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **49**
- SRM **8.9**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1 kg (16.7%)	81 %	4
Grain	Strzegom Monachijski typ I	1 kg (16.7%)	79 %	16
Grain	Strzegom Wiedeński	2 kg (33.3%)	79 %	10
Grain	Karmelowy Czerwony	0.5 kg (8.3%)	75 %	59
Grain	Karmelowy Jasny 30EBC	1.5 kg (25%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	44 g	60 min	11 %
Boil	Tradition	25 g	15 min	4.5 %
Boil	Tradition	100 g	0 min	4.5 %