

duzy alt

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **43**
- SRM **10.8**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **1000 liter(s)**
- Trub loss **5 %**
- Size with trub loss **1050 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **1265 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **700.5 liter(s)**
- Total mash volume **934 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	145 kg (62.1%)	82 %	4
Grain	Strzegom Monachijski typ II	75 kg (32.1%)	79 %	22
Grain	Viking Melanoidynowy	10 kg (4.3%)	75 %	60
Grain	Jęczmień palony	3.5 kg (1.5%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	1500 g	60 min	11.5 %
Boil	Tettnang	750 g	15 min	4.9 %
Boil	Tettnang	750 g	5 min	4.9 %
Whirlpool	Tettnang	1000 g	0 min	4.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP029 - German Ale/Kölsch Yeast	Ale	Liquid	500 ml	White Labs