Stary Niemiec

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **38**
- SRM **10.7**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	0.5 kg *(8.9%)*	80 %	4
Grain	Strzegom Bursztynowy	0.5 kg *(8.9%)*	70 %	49
Grain	Strzegom Monachijski typ I	2 kg *(35.7%)*	79 %	16
Grain	Strzegom Monachijski typ II	2 kg *(35.7%)*	79 %	22
Grain	Płatki owsiane	0.1 kg *(1.8%)*	85 %	3
Grain	Aromatic Malt	0.5 kg *(8.9%)*	78 %	51

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	9 %
Aroma (end of boil)	Tradition	25 g	15 min	5.5 %
Aroma (end of boil)	Hersbrucker	50 g	15 min	3 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP029 - German Ale/Kölsch Yeast	Ale	Liquid	40 ml	White Labs