

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 % |