

Düsseldorf Altbier

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **35**
- SRM **15.6**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **44.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **35.1 liter(s)**
- Total mash volume **45.2 liter(s)**

Steps

- Temp **53 C**, Time **35 min**
- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **35.1 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **35 min** at **53C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **10 min** at **77C**
- Sparge using **19.2 liter(s)** of **76C** water or to achieve **44.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Strzegom Pilzneński | 4 kg (39.8%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ II | 3.5 kg (34.9%) | 79 % | 22 |
| Grain | Słód Caramunich Typ II Weyermann | 1.5 kg (14.9%) | 73 % | 120 |
| Grain | Weyermann - Caraamber | 1 kg (10%) | 75 % | 65 |
| Grain | Strzegom pszenica prażona | 0.04 kg (0.4%) | 70 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Perle | 40 g | 50 min | 7.2 % |
| Boil | Perle | 30 g | 20 min | 7.2 % |
| Boil | Tradition | 20 g | 30 min | 5.5 % |
| Boil | Tradition | 50 g | 10 min | 5.5 % |