

Altbier

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **51**
- SRM **11.7**
- Style **Düsseldorf Altbier**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Monachijski | 3.5 kg (92.1%) | 80 % | 16 |
| Grain | Karmelowy żytni Strzegom | 0.25 kg (6.6%) | 75 % | 150 |
| Grain | Barwiący | 0.05 kg (1.3%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | lunga | 15 g | 60 min | 15 % |
| Boil | Tradition | 45 g | 30 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|-------|------|--------|------------|
| WLP920 - Old Bavarian Lager Yeast | Lager | Dry | 10 g | White Labs |