

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 |