

#32 Alt

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **42**
- SRM **15.3**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **21.7 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|--------|------|
| Grain | Strzegom Monachijski typ I | 5 kg (92.2%) | 79 % | 16 |
| Grain | Castlemalting - Cara Clair | 0.25 kg (4.6%) | 78 % | 4 |
| Grain | Special B Malt | 0.1 kg (1.8%) | 65.2 % | 315 |
| Grain | Strzegom Barwiący | 0.075 kg (1.4%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil | Tradition | 60 g | 60 min | 5 % |
| Boil | Tradition | 20 g | 30 min | 5 % |
| Boil | Tradition | 20 g | 10 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|------|------|--------|------------|
| Gozdawa - Old German Altbier | Ale | Dry | 10 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 0.5 g | Boil | 10 min |