

Dortmunder

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **22**
- SRM **5.6**
- Style **Dortmunder Export**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **63 C**, Time **20 min**
- Temp **73 C**, Time **40 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **73C**
- Keep mash **10 min** at **76C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 1.6 kg (50%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ II | 0.9 kg (28.1%) | 79 % | 22 |
| Grain | Jęczmień niestodowany | 0.7 kg (21.9%) | 75 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 9 g | 60 min | 10 % |
| Boil | Magnum | 2 g | 60 min | 11 % |
| Boil | Lublin (Lubelski) | 5 g | 20 min | 4 % |
| Boil | Tradition | 2 g | 10 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|-------|-------|--------|------------|
| gozdawa w-35 | Lager | Slant | 200 ml | --- |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | whirlfloc | 0.2 g | Boil | 10 min |