

Dortmunder

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **57**
- SRM **3.8**
- Style **Dortmunder Export**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **15.8 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **67 C**, Time **45 min**
- Temp **76 C**, Time **10 min**
- Temp **100 C**, Time **75 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **76C**
- Keep mash **75 min** at **100C**
- Sparge using **10.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------|---------------|-------|-----|
| Grain | Pilsner Malz Best | 3 kg (85.7%) | 81 % | 3 |
| Grain | Münchner Malz Best | 0.3 kg (8.6%) | 78 % | 20 |
| Grain | Carapils Best | 0.2 kg (5.7%) | 75 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Dr Rudi | 30 g | 50 min | 11.8 % |
| Boil | Mount Hood | 10 g | 20 min | 5.5 % |
| Aroma (end of boil) | Mount Hood | 20 g | 5 min | 5.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|-------|------|--------|------------|
| Saflager S-23 | Lager | Dry | 11.5 g | Fermentis |