

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