

Dortmunder

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **31**
- SRM **4.1**
- Style **Dortmunder Export**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **34.7 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.2 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **40 min** at **73C**
- Keep mash **10 min** at **78C**
- Sparge using **21.7 liter(s)** of **76C** water or to achieve **34.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6.25 kg (95.4%)	80 %	4
Grain	Karmelowy Jasny 30EBC	0.3 kg (4.6%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Brewers Gold DE-g	50 g	60 min	4.5 %
Boil	Magnum DE-g	6 g	60 min	11.5 %
Boil	Perle DE-un	35 g	15 min	7 %

Yeasts

Name	Type	Form	Amount	Laboratory
34/70	Lager	Slant	200 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	12 g	Boil	15 min