

Dortmunder Export

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **28**
- SRM **4**
- Style **Dortmunder Export**

Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **40.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **47.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **34 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **25.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Sparge using **30.6 liter(s)** of **76C** water or to achieve **47.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	7.5 kg (88.2%)	80 %	4
Grain	Strzegom Monachijski typ I	1 kg (11.8%)	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	10.5 %
Boil	Hellertauer Tradition	30 g	30 min	3.8 %
Boil	Hellertauer Tradition	30 g	15 min	3.8 %
Aroma (end of boil)	Hellertauer Tradition	40 g	0 min	3.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	50 ml	Fermentum Mobile