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 niesłodowany	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

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

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