Munich DRY STOUT

- Gravity **17.7 BLG**
- ABV **---**
- IBU **49**
- SRM **41.6**
- Style **Munich Dunkel**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **58 C**, Time **20 min**
- Temp **66 C**, Time **50 min**
- Temp **73 C**, Time **10 min**
- Temp **80 C**, Time **5 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **64.3C**
- Add grains
- Keep mash **20 min** at **58C**
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **73C**
- Keep mash **5 min** at **80C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski Ciemny Steinbach	5 kg *(70.4%)*	100 %	30
Grain	Biscuit Malt	1 kg *(14.1%)*	79 %	50
Grain	Special B Malt	0.5 kg *(7%)*	65.2 %	350
Grain	Kawowy Castle	0.6 kg *(8.5%)*	79 %	480

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Minstrel	50 g	59 min	4.9 %
Boil	Bohemie	50 g	25 min	7.89 %
Aroma (end of boil)	Angus	50 g	5 min	10.73 %
Dry Hop	Mosaic	50 g	7 day(s)	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

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

Extras

Type	Name	Amount	Use for	Time
Fining	mech	5 g	Boil	10 min