

# dry stout

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- Gravity **12.1 BLG**
- ABV ---
- IBU **39**
- SRM **43.6**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **67 C**, Time **10 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **10 min** at **67C**
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.5 kg (77.8%)	80 %	7
Grain	Płatki jęczmienne	0.5 kg (11.1%)	85 %	3
Grain	Jęczmień palony	0.3 kg (6.7%)	55 %	1000
Grain	Czekoladowy	0.2 kg (4.4%)	60 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	30 g	60 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Notes

- ciemne wsypane po 1h w 67 stopniach  
*Nov 5, 2016, 9:03 AM*