

St. Patrick Day Irish Dry Stout

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **34**
- SRM **35.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **34.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **50 C**, Time **20 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **50 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.2 liter(s)** of **76C** water or to achieve **34.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (61.5%)	80 %	5
Grain	Jęczmień niesłodowany	1 kg (15.4%)	75 %	2
Grain	Jęczmień palony	0.7 kg (10.8%)	55 %	985
Grain	Strzegom Karmel 600	0.5 kg (7.7%)	68 %	601
Grain	Pszeniczny	0.3 kg (4.6%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bullion	30 g	60 min	7.75 %
Aroma (end of boil)	Bramling Croaa	20 g	10 min	5 %
Aroma (end of boil)	Flyer	20 g	10 min	11 %
Whirlpool	Bramling Cross	30 g	5 min	6 %
Whirlpool	Flyer	30 g	5 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale