

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 |