

#43 American Rye Stout

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **66**
- SRM **37**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **24.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **24.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|--------|------|
| Grain | Pilzneński | 1 kg (25.6%) | 81 % | 4 |
| Grain | Żytni | 1 kg (25.6%) | 85 % | 8 |
| Grain | Wędzony bukiem Viking Malt | 0.5 kg (12.8%) | 82 % | 10 |
| Grain | Rye, Flaked | 0.4 kg (10.3%) | 78.3 % | 4 |
| Grain | Strzegom Czekoladowy jasny | 0.3 kg (7.7%) | 68 % | 400 |
| Grain | Carafa | 0.3 kg (7.7%) | 70 % | 664 |
| Grain | Jęczmień palony | 0.1 kg (2.6%) | 55 % | 985 |
| Grain | Żyto prażone | 0.3 kg (7.7%) | 65 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Mash | Centennial | 30 g | 0 min | 10.5 % |
| Boil | Chinook | 30 g | 60 min | 13 % |
| Boil | Chinook | 30 g | 10 min | 13 % |
| Aroma (end of boil) | Chinook | 40 g | 0 min | 13 % |
| Aroma (end of boil) | Centennial | 30 g | 0 min | 10.5 % |
| Dry Hop | Citra | 50 g | 5 day(s) | 12 % |

| | | | | |
|---------|--------|------|----------|--------|
| Dry Hop | Simcoe | 50 g | 5 day(s) | 13.2 % |
|---------|--------|------|----------|--------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 10 g | Danstar |