

## #39 American Rye Stout

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **43**
- SRM **31.9**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

### Fermentables

| Type  | Name                            | Amount         | Yield | EBC  |
|-------|---------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt            | 4.1 kg (57.7%) | 80 %  | 5    |
| Grain | Strzegom Pilzneński             | 1 kg (14.1%)   | 80 %  | 4    |
| Grain | Żytni                           | 1 kg (14.1%)   | 85 %  | 8    |
| Grain | Weyermann Specjal W             | 0.2 kg (2.8%)  | 68 %  | 300  |
| Grain | Fawcett - Pale Chocolate        | 0.2 kg (2.8%)  | 71 %  | 600  |
| Grain | Weyermann - Carafa I            | 0.2 kg (2.8%)  | 70 %  | 690  |
| Grain | Weyermann - Carafa II           | 0.2 kg (2.8%)  | 70 %  | 837  |
| Grain | Weyermann - Dehusked Carafa III | 0.2 kg (2.8%)  | 70 %  | 1024 |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Oktawia    | 15 g   | 60 min | 8.9 %      |
| Boil    | Oktawia    | 15 g   | 45 min | 8.9 %      |
| Boil    | Oktawia    | 15 g   | 30 min | 8.9 %      |
| Boil    | Centennial | 15 g   | 15 min | 11.2 %     |
| Boil    | Centennial | 15 g   | 5 min  | 11.2 %     |

### Yeasts

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