

## American stout 13 wersja 2.0

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **53**
- SRM **42.3**
- Style **American 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 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

### Fermentables

| Type    | Name                     | Amount         | Yield | EBC  |
|---------|--------------------------|----------------|-------|------|
| Grain   | Pale ale niemcy          | 3 kg (52.2%)   | --- % | 6    |
| Grain   | Monachijski              | 1 kg (17.4%)   | --- % | 15   |
| Grain   | Karmelowy                | 0.3 kg (5.2%)  | --- % | 300  |
| Grain   | Pszeniczny ciemny        | 0.2 kg (3.5%)  | --- % | 18   |
| Adjunct | Platki owsiane           | 0.4 kg (7%)    | --- % | ---  |
| Grain   | Palone ziarno jęczmienia | 0.15 kg (2.6%) | --- % | 1150 |
| Grain   | Carafa typ 2 weyermann   | 0.2 kg (3.5%)  | --- % | 1150 |
| Grain   | Pale chocolate           | 0.3 kg (5.2%)  | --- % | 620  |
| Grain   | Chocolate anglia         | 0.2 kg (3.5%)  | --- % | 1200 |

### Hops

| Use for | Name     | Amount | Time   | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil    | Warrior  | 15 g   | 60 min | 14.7 %     |
| Boil    | Citra    | 17 g   | 20 min | 13.5 %     |
| Boil    | Simcoe   | 17 g   | 15 min | 13.1 %     |
| Boil    | Amarillo | 17 g   | 10 min | 8.8 %      |
| Boil    | Citra    | 13 g   | 0 min  | 13.5 %     |
| Boil    | Simcoe   | 13 g   | 0 min  | 13.1 %     |
| Boil    | Amarillo | 13 g   | 0 min  | 8.8 %      |

### Notes

- Na cicha poszlo: 20gr citra, 20 gr simcoe, 20gr amarillo.  
*Jan 30, 2018, 7:56 PM*