

## warka 44

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **17.3**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

### Fermentables

| Type  | Name                       | Amount          | Yield | EBC  |
|-------|----------------------------|-----------------|-------|------|
| Grain | Munich Malt                | 1.16 kg (20.7%) | 80 %  | 22   |
| Grain | Briess - Wheat Malt, White | 0.25 kg (4.5%)  | 85 %  | 5    |
| Grain | Honey Malt                 | 0.184 kg (3.3%) | 80 %  | 13   |
| Grain | Vienna Malt                | 0.494 kg (8.8%) | 78 %  | 7    |
| Grain | Carafa III                 | 0.2 kg (3.6%)   | 70 %  | 1200 |
| Grain | Oats, Flaked               | 0.211 kg (3.8%) | 80 %  | 2    |
| Grain | Pale Malt (2 Row) UK       | 3.1 kg (55.4%)  | 78 %  | 6    |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Saaz (USA) | 20 g   | 50 min | 3.75 %     |
| Boil    | Lemon drop | 10 g   | 40 min | 5.5 %      |
| Boil    | Mosaic     | 10 g   | 30 min | 11.5 %     |
| Boil    | Mosaic     | 5 g    | 5 min  | 11.5 %     |
| Boil    | Lemon drop | 10 g   | 7 min  | 5.5 %      |

### Yeasts

| Name        | Type | Form  | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale  | Slant | 100 ml | Safale     |

### Notes

- po gotowaniu wyszło 1050  
*Apr 6, 2019, 4:20 PM*