

## pa pa dla was

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **41**
- SRM **4.5**

### 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 **10 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **19.8 liter(s)**

### Fermentables

| Type  | Name         | Amount        | Yield | EBC |
|-------|--------------|---------------|-------|-----|
| Grain | Pilzneński   | 4 kg (90.9%)  | 81 %  | 4   |
| Grain | Carahell     | 0.2 kg (4.5%) | 77 %  | 26  |
| Grain | Biscuit Malt | 0.2 kg (4.5%) | 79 %  | 45  |

### Hops

| Use for   | Name         | Amount | Time     | Alpha acid |
|-----------|--------------|--------|----------|------------|
| Boil      | hbc 682      | 10 g   | 60 min   | 18 %       |
| Whirlpool | hbc 682      | 40 g   | 15 min   | 18 %       |
| Dry Hop   | Simcoe cryo  | 25 g   | 3 day(s) | 26 %       |
| Dry Hop   | Idaho 7 cryo | 25 g   | 3 day(s) | 24 %       |