

## #186 Ważka, ważka, ważka

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **17**
- SRM **4.5**
- Style **Munich Helles**

### Batch size

- Expected quantity of finished beer **21.8 liter(s)**
- Trub loss **6 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **24.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **10 min**
- Temp **69 C**, Time **50 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **13.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **10 min** at **64C**
- Keep mash **50 min** at **69C**
- Keep mash **1 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Malt pilzneński	3.25 kg (70.7%)	80 %	4
Grain	Viking Malt monachijski	0.75 kg (16.3%)	80 %	16
Grain	Viking Malt wiedeński	0.45 kg (9.8%)	79 %	10
Grain	Carapils	0.15 kg (3.3%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Mittelfruh 2022	50 g	60 min	3.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM704 Lutra Kveik	Ale	Slant	50 ml	Fermentum Mobile