

## IX warka American Lager

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **19**
- SRM **3.7**
- Style **Standard American Lager**

### 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 **85.5 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **65 C**, Time **75 min**
- Temp **75 C**, Time **10 min**
- Temp **78 C**, Time **2 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Keep mash **10 min** at **75C**
- Keep mash **2 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.25 kg (94.4%)	81 %	4
Grain	Strzegom Monachijski typ I	0.25 kg (5.6%)	79 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	5 g	60 min	12 %
Boil	Citra	10 g	30 min	12 %
Aroma (end of boil)	Citra	10 g	5 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	11.5 g	Fermentis Division of S.I.Lesaffre