

Jedynastka Listopadowa

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **28**
- SRM **4.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **20.2 liter(s)**

Steps

- Temp **50 C**, Time **15 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.1 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **21.9 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (79.2%)	81 %	4
Grain	Strzegom Monachijski typ I	1 kg (19.8%)	79 %	16
Grain	Słód zakwaszający	0.05 kg (1%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	55 min	8.5 %
Boil	Lublin (Lubelski)	30 g	10 min	4.4 %
Aroma (end of boil)	Saaz (Czech Republic)	30 g	0 min	4 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloe T	2 g	Boil	10 min