

## sezon IV

---

- Gravity **14.7 BLG**
- ABV ---
- IBU **30**
- SRM **10.2**
- Style **Saison**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.2 liter(s)**

### Steps

- Temp **60 C**, Time **62 min**
- Temp **68 C**, Time **30 min**
- Temp **74 C**, Time **5 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **8.4 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **62 min** at **60C**
- Keep mash **30 min** at **68C**
- Keep mash **5 min** at **74C**
- Keep mash **1 min** at **78C**
- Sparge using **7.6 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.5 kg (51.7%)	81 %	4
Grain	Pszeniczny	0.5 kg (17.2%)	85 %	4
Grain	Carahell	0.1 kg (3.4%)	77 %	26
Grain	Caraaroma	0.1 kg (3.4%)	78 %	400
Grain	Strzegom Wiedeński	0.5 kg (17.2%)	79 %	10
Grain	zakwaszający	0.1 kg (3.4%)	--- %	4
Sugar	glukoza	0.1 kg (3.4%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	15 g	30 min	10 %
Boil	Saaz (Czech Republic)	15 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

FM21 Odkrycie sezonu	Ale	Liquid	1000 ml	Fermentum Mobile
----------------------	-----	--------	---------	------------------

### Extras

Type	Name	Amount	Use for	Time
Flavor	skórka pomarańczy (zest)	10 g	Boil	15 min

### Notes

- dodatek do wody: chlorek wapnia: 4g na 16L  
*May 3, 2017, 5:04 PM*