

# Znak Leszy

---

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **39**
- SRM **41.3**
- Style **Oatmeal Stout**

## 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 **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **20.1 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (52.2%)	80 %	5
Grain	Viking Wheat Malt	1 kg (17.4%)	83 %	5
Grain	Strzegom Czekoladowy ciemny	0.5 kg (8.7%)	68 %	1200
Grain	Strzegom Karmel 600	0.5 kg (8.7%)	68 %	601
Grain	Żytni	0.25 kg (4.3%)	85 %	8
Grain	Płatki owsiane	0.5 kg (8.7%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	10 g	60 min	18 %
Boil	Ariana	10 g	60 min	11.7 %
Aroma (end of boil)	Lublin (Lubelski)	5 g	15 min	4 %
Aroma (end of boil)	Summit	5 g	15 min	18 %
Aroma (end of boil)	Ariana	5 g	15 min	11.7 %
Whirlpool	Simcoe	5 g	0 min	13.2 %
Whirlpool	Ariana	5 g	0 min	11.7 %

Whirlpool	Lublin (Lubelski)	5 g	0 min	4 %
-----------	-------------------	-----	-------	-----

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Herb	Pączki sosny	50 g	Secondary	5 day(s)

### Notes

- <http://www.fontspace.com/cloutierfontes/cf-one-two-trees>  
*Jun 28, 2018, 5:06 PM*