

# Stary Las

- Gravity **16.4 BLG**
- ABV ---
- IBU **55**
- SRM **34.7**
- Style **Wood-Aged Beer**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **42 C**, Time **10 min**
- Temp **52 C**, Time **20 min**
- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **45.7C**
- Add grains
- Keep mash **10 min** at **42C**
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (61.5%)	80 %	4
Grain	Strzegom Monachijski typ I	1.5 kg (23.1%)	79 %	16
Grain	Strzegom Karmel 600	1 kg (15.4%)	68 %	601

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Vital	35 g	60 min	11.9 %
Boil	Vital	15 g	20 min	11.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Liquid	50 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
Flavor	Płatki dębowe amerykańskie	50 g	Secondary	14 day(s)
Flavor	Płatki dębowe francuskie	50 g	Secondary	14 day(s)

### Notes

- Wydłużyć przerwę białkową ( więcej monachijskiego)  
*Apr 4, 2017, 11:15 AM*