

# żytni lager NZ

- Gravity **12.6 BLG**
- ABV ---
- IBU **50**
- SRM **9.3**
- Style **Premium American Lager**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (41.7%)	80 %	4
Grain	Żytni	1 kg (20.8%)	85 %	8
Grain	Monachijski typ II 20-25 EBC Weyermann	0.5 kg (10.4%)	80 %	20
Grain	Strzegom Wiedeński	0.5 kg (10.4%)	79 %	10
Grain	Strzegom Karmel 150	0.4 kg (8.3%)	75 %	150
Grain	Viking Malt Wędzony Czereśnią	0.4 kg (8.3%)	82 %	10

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13 %
Boil	Green Bullet	15 g	60 min	12.2 %
Whirlpool	Rakau (NZ)	20 g	10 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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lager	Lager	Slant	400 ml	ja
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