

# 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<br>20-25 EBC<br>Weyermann | 0.5 kg (10.4%) | 80 %  | 20  |
| Grain | Strzegom Wiedeński                           | 0.5 kg (10.4%) | 79 %  | 10  |
| Grain | Strzegom Karmel<br>150                       | 0.4 kg (8.3%)  | 75 %  | 150 |
| Grain | Viking Malt<br>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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|       |       |       |        |    |
|-------|-------|-------|--------|----|
| lager | Lager | Slant | 400 ml | ja |
|-------|-------|-------|--------|----|