

# Łany Oklahomy mini

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **32**
- SRM **4.1**
- Style **American Wheat or Rye Beer**

## Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **6 %**
- Size with trub loss **15 liter(s)**
- Boil time **80 min**
- Evaporation rate **14 %/h**
- Boil size **20.2 liter(s)**

## Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

## Steps

- Temp **45 C**, Time **15 min**
- Temp **62 C**, Time **45 min**
- Temp **71 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **11.4 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **15 min** at **45C**
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **71C**
- Keep mash **5 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

## Fermentables

| Type                     | Name                               | Amount         | Yield | EBC |
|--------------------------|------------------------------------|----------------|-------|-----|
| Grain                    | Pale Wiking Malt                   | 1.4 kg (36.8%) | 79 %  | 6   |
| Grain                    | Pszeniczny 3,5-6,5 EBC Viking Malt | 0.7 kg (18.4%) | 80 %  | 5   |
| Grain                    | Pszenica niesłodowana              | 0.3 kg (7.9%)  | 70 %  | 3   |
| Kleikowanie 64°C, 20 min |                                    |                |       |     |
| Grain                    | Płatki jęczmienne błyskawiczne     | 0.5 kg (13.2%) | 70 %  | 4   |
| Grain                    | Płatki owsiane błyskawiczne        | 0.4 kg (10.5%) | 70 %  | 4   |
| Grain                    | Carapils Weyermann                 | 0.1 kg (2.6%)  | 75 %  | 4   |
| Grain                    | Zakwaszający pH 3,4-3,6            | 0.3 kg (7.9%)  | 10 %  | 3   |
| Grain                    | Łuska ryżowa sterylizowana         | 0.1 kg (2.6%)  | 1 %   | 1   |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------|--------|------|------------|
|---------|------|--------|------|------------|

|                     |                        |      |           |        |
|---------------------|------------------------|------|-----------|--------|
| Boil                | Columbus/Tomahawk/Zeus | 9 g  | 50 min    | 15.5 % |
| Boil                | Simcoe                 | 15 g | 15 min    | 13.2 % |
| Aroma (end of boil) | Simcoe                 | 11 g | 0 min     | 13.2 % |
| Aroma (end of boil) | Centennial             | 31 g | 0 min     | 10.5 % |
| Dry Hop             | Cascade                | 30 g | 10 day(s) | 7.6 %  |
| Dry Hop             | Centennial             | 30 g | 10 day(s) | 10.5 % |

## Yeasts

| Name                          | Type | Form  | Amount | Laboratory |
|-------------------------------|------|-------|--------|------------|
| Wyeast 1272 - American Ale II | Ale  | Slant | 150 ml | ---        |

## Extras

| Type        | Name               | Amount | Use for  | Time   |
|-------------|--------------------|--------|----------|--------|
| Water Agent | Kwas mlekowy       | 1 g    | Mash     | 53 min |
| Water Agent | Gips piwowarski    | 2 g    | Mash     | 15 min |
| Other       | Chłodnica          | 1 g    | Boil     | 15 min |
| Water Agent | Kwas l-askorbinowy | 2 g    | Bottling | ---    |

## Notes

- Woda 53:47%  
Tesco: RO  
*Apr 26, 2019, 9:40 AM*
- <http://blog.homebrewing.pl/american-wheat-receptura/>  
*Apr 26, 2019, 9:40 AM*
- Nagazować na 2.5  
*May 11, 2019, 9:21 PM*