

# Cienkie jak ... węża - Marasowe Urodzinowe :)

- Gravity **4.8 BLG**
- ABV **1.8 %**
- IBU **9**
- SRM **14.1**
- Style **Scottish Light 60/-**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **24.1 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **5.1 liter(s)**
- Total mash volume **6.8 liter(s)**

## Steps

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

## Mash step by step

- Heat up **5.1 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **60 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **20.7 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount          | Yield | EBC |
|-------|------------------------|-----------------|-------|-----|
| Grain | Monachijski            | 0.5 kg (29.4%)  | 80 %  | 16  |
| Grain | Pszeniczny             | 0.3 kg (17.6%)  | 85 %  | 4   |
| Grain | Strzegom Karmel 600    | 0.3 kg (17.6%)  | 68 %  | 601 |
| Grain | Briess - Carapils Malt | 0.1 kg (5.9%)   | 74 %  | 3   |
| Grain | Oats, Flaked           | 0.25 kg (14.7%) | 80 %  | 2   |
| Grain | Płatki żytnie          | 0.25 kg (14.7%) | 80 %  | 4   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Lomik   | 10 g   | 45 min   | 3.8 %      |
| Aroma (end of boil) | Chinook | 10 g   | 5 min    | 13 %       |
| Dry Hop             | Chinook | 20 g   | 4 day(s) | 13 %       |

## Yeasts

| Name                  | Type | Form   | Amount | Laboratory       |
|-----------------------|------|--------|--------|------------------|
| FM42 Stare Nadreńskie | Ale  | Liquid | 100 ml | Fermentum Mobile |