# Koniec zimy

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- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **78**
- SRM **18**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **74 liter(s)**
- Trub loss **2 %**
- Size with trub loss **76.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **88.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **63.7 liter(s)**
- Total mash volume **81.9 liter(s)**

## Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **40 min**
- Temp **80 C**, Time **10 min**

## Mash step by step

- Heat up **63.7 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **80C**
- Sparge using **43 liter(s)** of **76C** water or to achieve **88.5 liter(s)** of wort

## Fermentables

| Type | Name | Amount | Yield | EBC |
|---|---|---|---|---|
| Grain | Caraaroma | 1 kg *(5.5%)* | 78 % | 400 |
| Grain | Weyermann Extra Pale Premium Pilsner malt | 9.2 kg *(50.5%)* | 80 % | 3 |
| Grain | Cara Crystal 150 EBC Castle Malting | 2 kg *(11%)* | 78 % | 150 |
| Grain | Monachijski typ I Weyermann | 2 kg *(11%)* | 73 % | 80 |
| Grain | Płatki owsiane | 4 kg *(22%)* | 85 % | 3 |

## Hops

| Use for | Name | Amount | Time | Alpha acid |
|---|---|---|---|---|
| Boil | Cascade | 180 g | 70 min | 5.8 % |
| Boil | Amarillo | 30 g | 80 min | 8 % |
| Boil | Citra | 28.3 g | 80 min | 25.2 % |
| Boil | Simcoe | 28.3 g | 20 min | 27 % |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|---|---|---|---|---|

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

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| Kveik v.3 | Ale | Liquid | 3000 ml | moje |