

# Czekoladowo-Karmelowe

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **56**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **23.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Steps

- Temp **75 C**, Time **60 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **84.2C**
- Add grains
- Keep mash **60 min** at **75C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **23.2 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount     | Yield | EBC |
|-------|-----------------------------|------------|-------|-----|
| Grain | Strzegom Karmel 600         | 1 kg (20%) | 68 %  | 600 |
| Grain | Czekoladowy                 | 1 kg (20%) | 60 %  | 788 |
| Grain | Pszeniczny                  | 2 kg (40%) | 85 %  | 4   |
| Grain | Strzegom Monachijski typ II | 1 kg (20%) | 79 %  | 50  |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Wai-iti | 100 g  | 30 min | 2.5 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 11.5 g | ---        |