

# Cosmo

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **9**
- SRM **3.9**
- Style **Fruit Beer**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 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 **68 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount     | Yield | EBC |
|-------|-------------------|------------|-------|-----|
| Grain | Strzegom Pale Ale | 3 kg (60%) | 79 %  | 6   |
| Grain | Płatki owsiane    | 1 kg (20%) | 85 %  | 3   |
| Grain | Pszeniczny        | 1 kg (20%) | 85 %  | 4   |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 10 g   | 30 min | 11 %       |

## Yeasts

| Name     | Type | Form  | Amount | Laboratory |
|----------|------|-------|--------|------------|
| hazydaze | Ale  | Slant | 250 ml | ---        |

## Extras

| Type   | Name                    | Amount | Use for   | Time     |
|--------|-------------------------|--------|-----------|----------|
| Flavor | Sok żurawinowy          | 1000 g | Secondary | 7 day(s) |
| Flavor | Sok z pomarańczy + zest | 200 g  | Secondary | 7 day(s) |
| Flavor | Limonka + zest          | 50 g   | Secondary | 7 day(s) |