

# Xmass Belgsperyment

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **30**
- SRM **19.6**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield  | EBC |
|-------|---------------------|----------------|--------|-----|
| Grain | Strzegom Pilzneński | 3 kg (44.4%)   | 80 %   | 4   |
| Grain | Castle Pale Ale     | 2 kg (29.6%)   | 80 %   | 8   |
| Grain | Kawowy              | 0.25 kg (3.7%) | 75 %   | 500 |
| Grain | Crystal 150EBC      | 1 kg (14.8%)   | 78 %   | 150 |
| Sugar | Candi Sugar, Clear  | 0.5 kg (7.4%)  | 78.3 % | 2   |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 20 g   | 60 min | 15.5 %     |
| Boil    | Saphir                 | 15 g   | 15 min | 2.6 %      |

## Yeasts

| Name                    | Type | Form   | Amount | Laboratory       |
|-------------------------|------|--------|--------|------------------|
| FM26 Belgijskie Pagórki | Ale  | Liquid | 200 ml | Fermentum Mobile |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|       |              |     |      |        |
|-------|--------------|-----|------|--------|
| Spice | goździki     | 5 g | Boil | 10 min |
| Spice | Cynamon kora | 5 g | Boil | 10 min |