

# Xmas Alle ! - Wersja 1

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **19**
- SRM **31.7**
- Style **Christmas/Winter Specialty Spiced Beer**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **28.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **36 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **27 liter(s)** of **76C** water or to achieve **36 liter(s)** of wort

## Fermentables

| Type    | Name                               | Amount         | Yield | EBC  |
|---------|------------------------------------|----------------|-------|------|
| Grain   | Pale Ale IREKS                     | 3.5 kg (63.6%) | 85 %  | 7    |
| Grain   | Karmelowy Jasny 30EBC              | 0.2 kg (3.6%)  | 75 %  | 30   |
| Grain   | Weyermann - Pszeniczny Czekoladowy | 0.7 kg (12.7%) | 65 %  | 980  |
| Adjunct | Płatki żytnie błyskawiczne         | 1 kg (18.2%)   | --- % | ---  |
| Grain   | Pszeniczny palony                  | 0.1 kg (1.8%)  | 55 %  | 1400 |

## Hops

| Use for             | Name        | Amount | Time   | Alpha acid |
|---------------------|-------------|--------|--------|------------|
| Boil                | lunga       | 15 g   | 60 min | 11 %       |
| Aroma (end of boil) | Hersbrucker | 35 g   | 20 min | 3 %        |
| Whirlpool           | Hersbrucker | 25 g   | 1 min  | 3 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |

## Extras

| Type   | Name               | Amount | Use for   | Time      |
|--------|--------------------|--------|-----------|-----------|
| Spice  | Cynamon            | 15 g   | Boil      | 10 min    |
| Spice  | Anyż               | 4 g    | Boil      | 3 min     |
| Spice  | Goździki           | 1 g    | Boil      | 10 min    |
| Spice  | Kardamon           | 5 g    | Boil      | 10 min    |
| Spice  | Gałka Muszkatołowa | 4 g    | Boil      | 10 min    |
| Spice  | Curacao            | 5 g    | Boil      | 10 min    |
| Other  | Laktoza            | 800 g  | Boil      | 20 min    |
| Flavor | Płatki Dębowe      | 50 g   | Secondary | 14 day(s) |