

# AAA Christmas Ale

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **32**
- SRM **14.9**
- Style **American Amber Ale**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **20.2 liter(s)**

## Fermentables

| Type  | Name                          | Amount          | Yield  | EBC |
|-------|-------------------------------|-----------------|--------|-----|
| Grain | Strzegom Pale Ale             | 2.1 kg (41.6%)  | 79 %   | 6   |
| Grain | Strzegom Pilzneński           | 1.65 kg (32.7%) | 80 %   | 4   |
| Grain | Słód pszeniczny Bestmalz      | 0.9 kg (17.8%)  | 82 %   | 5   |
| Grain | Karmelowy Pszeniczny Strzegom | 0.25 kg (5%)    | 79 %   | 600 |
| Grain | red crystal                   | 0.15 kg (3%)    | 71.3 % | 400 |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Mosaic | 15 g   | 30 min | 12 %       |
| Boil    | Citra  | 15 g   | 30 min | 13.5 %     |
| Boil    | Mosaic | 25 g   | 1 min  | 12 %       |
| Boil    | Citra  | 25 g   | 1 min  | 13.5 %     |

## Yeasts

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

## Extras

| Type  | Name     | Amount | Use for | Time   |
|-------|----------|--------|---------|--------|
| Spice | kolędra  | 10 g   | Boil    | 30 min |
| Spice | Kardamon | 4 g    | Boil    | 15 min |
| Spice | Imbir    | 5 g    | Boil    | 15 min |
| Spice | Cynamon  | 6 g    | Boil    | 15 min |