

Christmas Ale

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **8**
- SRM **12.6**
- Style **American Amber Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 8 kg (72.7%) | 80 % | 5 |
| Grain | Karmelowy Czerwony | 3 kg (27.3%) | 75 % | 50 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Aroma (end of boil) | Styrian Golding | 10 g | 10 min | 3.6 % |
| Boil | Styrian Golding | 20 g | 20 min | 3.6 % |
| Boil | Styrian Golding | 20 g | 60 min | 3.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 10 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|--------------------|--------|---------|--------|
| Spice | Cynamon | 20 g | Boil | 10 min |
| Spice | Goździki | 8 g | Boil | 10 min |
| Spice | Cukier waniliowy | 30 g | Boil | 10 min |
| Spice | Gałka muszkatolowa | 6 g | Boil | 10 min |
| Spice | Imbir | 15 g | Boil | 10 min |
| Spice | Kardamon | 8 g | Boil | 10 min |
| Spice | Kolendra | 1 g | Boil | 10 min |
| Spice | Skórka mandarynki | 20 g | Boil | 10 min |
| Fining | Chmiel irlandzki | 20 g | Boil | 10 min |
| Flavor | Ksylitol | 250 g | Boil | 10 min |

| | | | | |
|-------------|------------|-----|------|--------|
| Water Agent | Witamina C | 5 g | Boil | 10 min |
|-------------|------------|-----|------|--------|