

West Coast IPA pierwszy

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **59**
- SRM **10.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **32.8 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.93 liter(s) / kg**
- Mash size **23.6 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **23.6 liter(s)** of strike water to **69.6C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **5 min** at **76C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **32.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Bestmalz Red X | 5 kg (83.3%) | 79 % | 30 |
| Grain | Pilsner malt Muntons | 1 kg (16.7%) | 82 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 25 g | 60 min | 16.6 % |
| Aroma (end of boil) | Chinook | 30 g | 15 min | 12 % |
| Aroma (end of boil) | Chinook | 20 g | 10 min | 12 % |
| Aroma (end of boil) | Comet | 10 g | 5 min | 8.8 % |
| Dry Hop | Chinook | 35 g | 5 day(s) | 12 % |
| Dry Hop | Comet | 40 g | 5 day(s) | 8.8 % |
| Dry Hop | Columbus/Tomahawk/Zeus | 40 g | 3 day(s) | 16.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------|------|--------|--------|------------|
| FM54 Gorączka kalifornijska | Ale | Liquid | 800 ml | starter |
| gęstwa 11-dniowa | | | | |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|---------------------|--------|---------|--------|
| Water Agent | gips | 6 g | Mash | 90 min |
| Water Agent | chlorek wapnia [ml] | 1.72 g | Mash | 90 min |
| Fining | whirflok | 1 g | Boil | 15 min |