|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number column | Name of column | Description | Do we have missing values? | Drop? | Why? | Additional remark |
| 1 | GDENAMK | Name of the village | No | Yes | Redundant with GDNER ; suffer from data scraping not containing special characters |  |
| 2 | GDENR | [Swiss official commune register](https://www.bfs.admin.ch/bfs/en/home/basics/swiss-official-commune-register.html) | No | No |  |  |
| 3 | KTKZ | Canton | No | No |  | 26 Cantons might help when there are few listings in a certain postal code |
| 4 | Address | Street address + Postal code | No | Yes | Redundant with GDNER; overfitting |  |
| 5 | Appartments | appartments | Yes (all) | Yes | Always blank |  |
| 6 | Area | Square meters location | Yes (some) | No |  | Consider removing observations which do not have an area |
| 7 | Area usable | Area usable | Yes (many) | Yes | In some cases is contradictory (where Area usable is higher than the Area) and it is only available for few listings |  |
| 8 | Balcony | Does the listing have a balcony? (1 = yes) | Yes (some/many) | No |  | A 0 has to be added instead of NA |
| 9 | Basement | Does the listing have a basement? (1 = yes) | Yes (many) | Yes | Few listings have a basement, even though it is pretty common in Switzerland. Probably not an accurate descriptor |  |
| 10 | Bath | Does the listing have a bath? (1 = yes) | Yes (many) | Yes | Few listings have a bath, even though most of the listings probably have 1 or more baths. Not an accurate descriptor |  |
| 11 | Bath tube | Does the listing have a bath? (1 = yes) | Yes (all) | Yes |  |  |
| 12 | Bright | Is the listing bright? (1 = yes) | Yes (many) | Yes | Too many empty values |  |
| 13 | Building\_plot | ? | Yes (all) | Yes | Always blank |  |
| 14 | Cabletv | Is the listing already connected to cable tv? (1 =yes) | Yes (some) | Try |  | The data is relevant, but I doubt that this factor would influence in either a positive or negative way the listing. |
| 15 | Ceiling |  | Yes (all) | Yes | Always blank |  |
| 16 | cheminee | Does the listing have a fireplace? (1 = yes) | Yes (many) | No |  | Having a fireplace is probab |
| 17 | Date | When was the listing posted? | No | Yes (probably) | All listings are in the same year and the swiss market was stable in 2019 (fluctuations of 1 to 2 per cent) |  |
| 18 | Descr | Description | Yes(some) | Yes | Could be a useful indicator but it would require an analyse outside our capabilities |  |
| 19 | Dishwasher | Does the listing have a dishwasher? (1 = yes) | Yes(many) | Yes | Few listings have a Dishwasher, even though it is pretty common in Switzerland. Probably not an accurate descriptor. According to 2015 statistics >85% households should have it |  |
| 20 | Dryer | Does the listing have a dryer? (1=yes) | Yes(many) | Yes | Same as above. According to 2015 statistics >38% households should have it |  |
| 21 | Elevator | Does the listing have a elevator? (1 = yes) | Yes(some) | No |  |  |
| 22 | Floors | At which floor is the listing located? | Yes(some) | No |  |  |
| 23 | Furnished | Is it furnished? | Yes (all) | Yes | Always blank |  |
| 24 | Garden\_m2 | Garden\_m2 | Yes (all) | Yes | Always blank |  |
| 25 | gardenshed | gardenshed | Yes (all) | Yes | Always blank |  |
| 26-27-28-29-30-31-32 | heating\_air, heating\_earth, heating\_electro, heating\_far, heating\_gas, heating\_oil, heating\_pellets |  | Yes (all) | Yes | Always blank |  |
| 33 | Home type | Attika, wohnung, dachwohnung, loft, maisonette, studio, terrassewohnung, | No | No |  |  |
| 34 | kids\_friendly | Is the listing considered kid friendly? (1 =yes) | Yes(some) | No |  |  |
| 35 | lat | latitude | No | Yes |  |  |
| 36 | laundry |  | Yes (many) | Yes | Probably not an accurate descriptor. |  |
| 37 | lon | longitude | No | Yes |  |  |
| 38 | manlift |  | Yes (all) | Yes | Always blank |  |
| 39 | middle\_house |  | Yes (all) | Yes | Always blank |  |
| 40 | minergie |  | Yes (all) | Yes | Always blank |  |
| 41 | new\_building | Renovated ? | Yes(some) | No |  |  |
| 42 | newly\_built | Built between 2017 and 2020 | Yes (all) | No |  |  |
| 43 | Old\_building |  | Yes(some) | No |  |  |
| 44 | Oven | Does the listing have a oven? (1 = yes) | Yes(many) | Yes | Few listings have a oven, even though it is pretty common in Switzerland. Probably not an accurate descriptor |  |
| 45 | parking\_indoor |  | Yes(some) | No |  |  |
| 46 | parking\_indoor |  | Yes(some) | No |  |  |
| 47 | pets |  | Yes (many) | Yes | Probably not an accurate descriptor. |  |
| 48 | playground |  | Yes (many) | Maybe? |  |  |
| 49 | pool |  | Yes (all) | Yes | Always blank |  |
| 50 | public\_transport |  | Yes (all) | Yes | Always blank |  |
| 51 | quarter\_general | In which quarter was the listing posted? | No | Yes | All listings are in the same year and the swiss market was stable in 2019 (fluctuations of 1 to 2 per cent) |  |
| 52 | quarter\_specific | In which quarter was the listing posted? + year (2019) | No | Yes | All listings are in the same year and the swiss market was stable in 2019 (fluctuations of 1 to 2 per cent) |  |
| 53 | quiet |  | Yes (all) | Yes | Always blank |  |
| 54 | raised\_groundfloor | The listing is not on street level, but raised a few steps. | Yes (many) | Maybe? | Floor is more impactful |  |
| 55 | rooms | How many rooms? | Yes (some) | No |  |  |
| 56 | shared\_flat |  | Yes (all) | Yes | Always blank |  |
| 57 | shopping |  | Yes (all) | Yes | Always blank |  |
| 58 | shower |  | Yes (all) | Yes | Always blank |  |
| 59 | Size land |  | Yes (many) | Maybe? | Few values to train |  |
| 60 | sunny |  | Yes (all) | Yes | Always blank |  |
| 61 | terrace |  | Yes (all) | Yes | Always blank |  |
| 62 | toilets | Does the listing have a toilet? (1 = yes) | Yes (many) |  | Few listings have a toilet, even though it is pretty common in Switzerland. Probably not an accurate descriptor |  |
| 63 | veranda |  | Yes (all) | Yes | Always blank |  |
| 64 | water |  | Yes (many) |  | Few listings have water, even though it is pretty common in Switzerland. Probably not an accurate descriptor |  |
| 65 | wheelchair |  | Yes (all) | Yes | Always blank |  |
| 66 | year | 2019 (for all) | No | Yes |  |  |
| 67 | Year\_built |  | Yes (some) | No |  |  |
| 68 | Micro\_rating | how attractive it is (sum of the ratings to the right) 1 lowest 10 highest | No | No |  |  |
| 69, 70, 71,72,73 | Micro\_rating\_NoiseAndEmission, Micro\_rating\_Accessibility, Micro\_rating\_DistrictAndArea, Micro\_rating\_SunAndView, Micro\_rating\_ServicesAndNature, | Breakdown of the micro\_rating | No | Yes |  |  |
| 74 |  |  |  |  |  |  |
| 75 |  |  |  |  |  |  |

Whg\_avg\_sonnenklasse can be dropped

Anteil\_auslaend share foreign

anteil\_efh share single family home

avg\_anzhl\_geschosse better take the floor

avg\_bauperiode construction years of the surrounding buildings

better to stop with the first 5 micro (if you want)