

# How to make EM-active at home

reference info-paper from [www.emro.co.jp](http://www.emro.co.jp)  
 english translation + Drawing Ayumi Matsuzaka

«Ratio» EM1 is 2% of the whole volume.

EM-1 30ml	Molasses 30ml	Water 1350ml	PET 1.5L
EM-1 40ml	Molasses 40ml	Water 1800ml	PET 2L

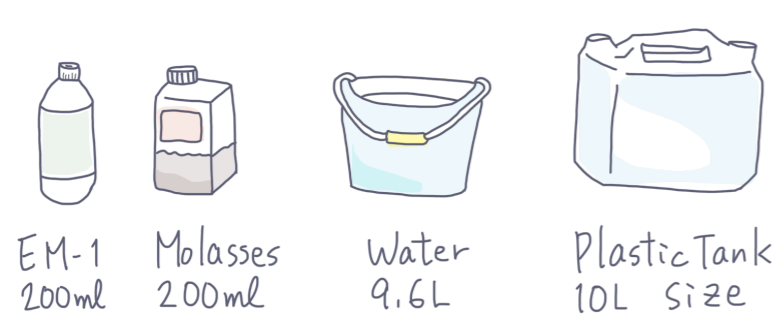
EM = Effective Microorganisms



- «Tips»
- ☞ Use clean PET bottles.
  - ☞ Close the lid of the bottle tightly.
  - ☞ If you cook rice often, you can use fresh rice rinsing-water.
  - ☞ If you can measure PH, less than PH 3.5 is good.
  - ☞ Best to use the EM-active in two weeks.

- 1** Put water 1350 ml into a bowl. Add EM-1 30 ml and molasses or alternative material 30 ml and mix them well.
- 2** Put this liquid into 1.5 Liter PET bottle. Please do not fill 100%. Keep few cm of space for air.
- 3** Close the lid tightly and store it in a warm place. Between 20 to 40 degrees is the best.
- 4** After two to three days open the lid carefully. Let the gas from the bottle out. Close the lid again.
- 5** In summer time after one week, in winter time ten days to two weeks, the process is complete. If it has a sweet-sour fermented smell, then it is ready to use.

## 10 liter Tank Version



- «Tips»
- ☞ If you add EM-1 and molasses a little bit more than you need, fermentation goes well. You can also adjust when you get experienced.
  - ☞ Close the lid tightly.
  - ☞ Clean the plastic tank every time.
  - ☞ As an option you can also add EM-ceramic into the water. Fermentation goes smoothly. Less than PH 3.5 is optimal.

- 1** Dissolve molasses 200ml or alternative material into in water beforehand. Put this dissolved liquid into a ten L plastic tank. Add the rest of the water to the tank.
- 2** Add EM-1 200ml to the tank and mix well. Close the lid tightly and store it in a warm place, but out of direct sunlight.
- 3** Two to three days later, when the gas comes from the bottle, open the lid slowly and remove it from the tank. In summer time after one week, in winter time ten days to two weeks, the process is completed. If it has a sweet-sour, fermented smell, then it is ready to use.