

EM-1 INGREDIENTS

EM-1 ingredients (U.S. version as of May 2010)

EM-1 is OMRI Listed (Organic Materials Review Institute), omri.org, and can be used by certified organic operations.

ACTIVE INGREDIENTS:

Microorganisms: 1 million colony forming units/cc (units/ml), 1%:
Lactobacillus plantarum, Lactobacillus casei, Lactobacillus fermentum,
Lactobacillus delbrueckii, Bacillus subtilis, Saccharomyces cerevisiae,
Rhodopseudomonas palustris.

IN-ACTIVE INGREDIENTS:

- 96% Water and 3% Molasses
- **L. plantarum - Lactic Acid Bacteria** - in saliva (first isolated); liquefies gelatin [foods found in: sauerkraut, pickles, brined olives, kimchi, Nigerian ogi, sourdough, cheeses, fermented sausages, stockfish]
- **L. casei** - in human intestine and mouth; known to improve digestion and reduce lactose deficiency and constipation ; complements growth of L. acidophilus [foods found in: cheddar cheese, green olives]
- **L. fermentum** [foods found in: sourdough]
- **L. delbrueckii** [foods found in: yogurt, mozzarella cheese, pizza cheese, Hartkäse, Berg-Alpkäse, Bleu de Bresse, Bleu de Gex, Fourme d'Ambert]
- **Bacillus subtilis** - commonly found in soil; can survive extreme heat; natural fungicidal activity; used in alternative medicine; can convert explosives into harmless compounds; used in safe radioactive waste; produces amylase enzyme (present in saliva; breaks down starch into sugar) [foods found in: Japanese natto (fermented soy beans), Korean cheonggukjang (fermented soybean paste)]
- **Saccharomyces cerevisiae - Yeast** - brewing and baking, top-fermenting yeast (ale) [in foods: baked breads, coffeecakes, pastries, croissants] [in beverages: beer, wine, mead, cider, vinegar]
- **Rhodopseudomonas palustris - Phototrophic Bacteria** - naturally found in soil and water, a food source for small organisms (zooplanktons, small crustacea); a natural detoxifier; degrades odors in agricultural and industrial waste; stimulates growth of actinomycetes (white mold) which suppresses the growth of pathogenic fungi, improves soil structure, humus formation, helps soil retain water, and breaks down tough plant materials; benefits growth of certain crops and fruits; also found in earthworm droppings, swine waste lagoons, marine coastal sediments, pond water. [foods found in: Swiss cheese]