TECHNICAL BULLETIN

BULLETIN 24

MILKY WATER

SYMPTOM	When water is drawn from the hot tap, it appears to be milky. After allowing the water to stand for several minutes, the water will clear.

CAUSE	Gases such as oxygen, chlorine, carbon dioxide, hydrogen sulfide, and others are soluble in water. As the pressure increases, the amount of gas that water can hold in a solution decreases. When air and gases are forced out of the heated water, the problem may be evident in one or both of the following ways: • Gases may make the water appear milky from the hot tap. Allowing the water to stand for several minutes, small bubbles (dissolved gases) that give the water a milky appearance will separate and the milky appearance will go away. This same reaction is observed as the air bubbles form on the walls of pans shortly before water begins to boil. • The release of dissolved gas can also create air pockets and air locks in plumbing systems. The spurts of air or gas encountered upon opening hot water faucets often are attributable to this condition. In addition to the gases released from heating water, the anode rod (factory installed) maintains an invisible film of free hydrogen on the entire heater surface. This keeps the metallic ions at the cathodic area from going into solution which in turn protects the tank against corrosion. This is most active when heaters are less than one year old.

THE FIX	Milky water caused by dissolved gasses can be much reduced with aerated faucets. However, sometimes milky water cannot be cured entirely.

NOTE	Air and gases precipitating out of water are not harmful, and these reactions will reduce in time.

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