

# Understanding Fracturing Fluid

## Typical Additives Used in Fracturing Fluid and COMMON HOUSEHOLD ITEMS

The fluid from the hydraulic fracturing process is nearly

**99.5%**  
**WATER**  
& **SAND.**

**9.5%**  
**SAND**

**90%**  
**WATER**

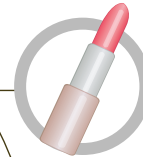
**0.5%**  
CHEMICAL  
ADDITIVES



**SODIUM CHLORIDE**  
*used in table salt*



**ETHYLENE GLYCOL**  
*used in household cleaners*



**BORATE SALTS**  
*used in cosmetics*



**SODIUM/POTASSIUM  
CARBONATE**  
*used in detergent*



**GUAR GUM**  
*used in ice cream*



**ISOPROPANOL**  
*used in deodorant*

To create productive natural gas wells, companies force fluid thousands of feet below the surface at high pressure to crack shale rock and release trapped natural gas. This extraction technique is called hydraulic fracturing. The fluid used in the process is made up almost entirely of water and sand. However, it also includes a very small percentage of chemical additives that help make the process work.