## **UNDERSTANDING PH BALANCES**



PH is a unit of measure to determine the alkalinity and acidity of a solution. PH has been defined as either the "power of Hydrogen" or "Pre-existing Hydrogen". It is rated on a scale of 0 to 14. 0 to 6.5 being acidic (Hydrogen) and 7.5 to 14 being an alkali (Hydroxide). 7 being neutral.

Most stones used today are sensitive to both acidic and alkali cleaners. This is due to the fact that most stones are classified as hydroxides which classifies them as natural alkalis. Acids will burn most stones by dissolving the bonding agents that keep them

by dissolving the bonding agents that keep them together. Alkalis usually do not damage stone as quickly, however, they will cause deterioration if left on the surface for a long time.

The corrosiveness of acids can not always be measured with the PH scale. In most instances, the lower the PH number the stronger the acid. A solution with a PH level of 1 is usually stronger than a solution with a PH of 4. However, there are some acids with a higher PH those are stronger then acids with a lower PH.

On the alkali side, the higher the PH number the stronger the alkali should be. A solution with a PH balance of 12 is usually stronger than a solution with a PH of 9. When using an alkali cleaner, never use hot water because it may create a stronger alkali reaction with adverse effects.

## PH scale

<u>0_1_2_3_4_5_66.5_</u>	77.58	91011121314
ACIDS	NEUTRAL	ALKALIS
ACID BOWL CLEANERS	LEM-3	STRIPPERS
VINIGER	MANGIA MACCHIA	DEGREASERS
MOST FRUIT JUICES	POLISH LISTO	AMMONIA
ALCOHOLIC BEVERAGES	CLEAN AND POLISH	DIRT AND SOIL
MANY HOUSEHOLD BATHROOM	AS22	MOST ALL-PURPOUSE HOUSEHOLD
CLEANERS	STONE CARE KIT	CLEANERS

Understanding PH balances will help select the proper chemicals that can be used on stone. However, an important factor to consider when selecting a stone maintenance chemical is the activity level. For example, most neutral cleaners have a PH balance of 7. However, some neutral cleaners are stronger than others because they have higher activity levels. There are many neutral cleaners that are not active enough to thoroughly clean a stone's porous surface. There are also an abundance of neutral cleaners that are too active for stone to endure. This is why it's important to pay attention when selecting a stone cleaner. Equally important is to try each cleaner on a small side-piece of surface before applying it to the whole surface.