



Neutralizer 1 – Liquid Acidic Neutralizing Fluid.

Description:

Neutralizer 1 a concentrated solution of liquid Sulfuric Acid, ~50% by weight (H₂SO₄), CAS #: 7664-93-9. Neutralization is the pH adjustment of waste streams to within acceptable limits set by regulatory agencies (local, state and federal). While it is certainly not a complete treatment of industrial or commercial wastes, it is required in many instances as a final step before discharging into the public sewers. Many municipalities allow discharges of pH's within 6-9, but always check with your own regulatory agency for complete guidelines.

The neutralization process may also be used to precipitate and settle out heavy metals such as iron, zinc, copper, cadmium, and chromium. The first step in this process is adjustment of the pH of the waste stream. Insoluble metal hydroxides are formed by the reaction of the basic chemical with the metal at a pH range of 6.0 - 9.0. Not all metals become insoluble at the same pH. For this reason, the pH is usually adjusted to remove the metals that are the most toxic or the highest concentrations.

Applications:

For waste treatment neutralization. Add small quantities with agitation to treatment tank or process stream at ambient temperatures. Care should be taken when adding to systems with pH's greater than 12. Addition of Neutralizer 1 can cause violent exothermic reactions (creating heat) and "boil-out" or explosions in non-vented systems. **Note: For safety reasons Neutralizer 1 is a partially neutralized with water to prevent extremely violent exothermic reactions with water and alkaline solutions as would be the case with concentrated sulfuric acid.**

Typical usage parameters:

	Neutralizer 1
Concentration Range	Case dependant
Operating temperatures	Ambient
pH increasing	●
Neutralization	●
Color	Colorless
Form	Liquid

Physical Properties:

	Neutralizer 1
pH, concentrate	<1
pH, @ 10% b.v.	1
Bulk Density, #/gal	12
VOC (@ max. use Conc.)	None
Solubility in water	Complete
Flash point	None



Handling: Corrosive material handle with caution. Use with adequate ventilation.

Availability: Available in 5, 55 and 300 gallon containers. Bulk tank shipments also available.

Shipment: Freight classification: "Corrosive Liquid, NOS, 8, PGIII (Sulfuric acid mixture) UN1760."

Storage: Keep from freezing. Store between 50-120 °F. Product may freeze at temperatures < 50 °F. If freezing occurs, thaw and mix until uniform.

Disposal: Dispose of in accordance with local, state, and federal regulations. For assistance with disposal contact NuGeneration Technologies at 888-99-NuGen or e-mail: info@nugentec.com

