WST PRODUCT INFORMATION

WATER SPECIALISTS TECHNOLOGIES LLC

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SPX PRECIPITATING REAGENT

SPX is a liquid sulfide precipitating reagent formulated for the treatment of wastewaters requiring removal of heavy metals - including chelated and complexed ions. **SPX** precipitates a wide variety of metals simultaneously and provides a low cost supplement to hydroxide precipitation. The reaction forms insoluble metallic precipitates with minimal sludge generation. **SPX** does not contain carbamates and can be used in new or existing wastewater treatment systems.

APPLICATIONS: **SPX** can be used whenever ionic metals in solution require precipitation and removal. It is effective in breaking chelators and other compounds which complex metallic ions making them resistant to conventional hydroxide precipitation.

pH CONTROL: The pH of the solution must be at 7.0 or above before adding **SPX**. An adequate exhaust system should be installed to provide back-up in the event of pH control failure.
Exhaust Ventilation is required for all chemical operations.

DOSING CRITERIA: To determine the approximate dosage of **SPX** required for treatment, use the following formula:

(PPM Metal) X (Gallons to be treated) X (0.08079)
Equals Milliliters of **SPX** required, ±10%.

The dosage can be lowered when some of the metals are precipitated as hydroxides during pH adjustment. For example: a waste stream contains 50 ppm copper, 5 ppm tin, 5 ppm lead, 6 ppm nickel (total 66 ppm ionic metal). After pH adjustment, (hydroxide precipitation) a total of only 10 ppm chelated/complexed ions may remain to be treated.

To do your own bench-scale jar tests with **SPX**, ask for a sample and our Jar Test Procedure Bulletin.

In a full scale installation, **SPX** should be dosed by means of an electronic dosing system which includes an ion specific electrode, reagent controller and metering pump. Ask for our product bulletin on Reagent Control Systems.

NOTE: Oxidizers in a waste stream, such as chlorine, peroxide, permanganate, persulfate, etc., will decrease the effective strength of precipitating reagents. Oxidizers should be eliminated from the wastewater with Sulfite, Bisulfite, or **CR-20**. Cyanide and hexavalent chromium, if present, must be removed from the waste stream prior to any chemical precipi-tation process..

See Material Safety Data Sheet for further information. 04/00