

PLATING RESOURCES, INC.



"Surface Finishing Technology"

Polystrip 26

Description

Polystrip 26 is an alkaline compound that is used for electrolytic stripping of chromium. It is a free flowing non-dusting powder that is readily soluble in water. Polystrip 26 provides a more conductive solution, which strips chromium at a faster rate than other compounds. This bath also may be used as a neutralizer for residual acid films and as an aid in cleaning lead anodes.

Operating Conditions

	<u>Optimum</u>	<u>Range</u>
Polystrip 26	25 oz. /gal.	15 - 50
pH Levels	12 - 14	12 - 14
Current Density	1 A.S.I.	0.15 - 1.5
Temperature (°F)	100	60 - 140

Base Metals

Polystrip 26 is especially designed for use on steel parts. Its use will provide a clean surface that is ready for further processing, such as plating. Polystrip 26 must not be used for stripping articles made of, or containing, aluminum, beryllium, brass, bronze, copper, ferrotic, solder, stainless steel or zinc. Type 304 stainless steel can, however, be stripped in Polystrip 26. Alloys that are high in carbon will have a black smut on the surface after stripping. This is easily removed by typical polishing and/or glass beading operations.

Stripping Rate

The stripping rate is variable; conditions, such as concentration, temperature, agitation, deposit type, current density, conductivity and anode: cathode ratio, will have an effect. Under normal conditions, a strip rate of approximately 0.003" per hour will be realized. The last trace of the chrome deposit, around edges and high current density areas, usually strips last and may take longer, as will deep recesses.

The strip rate may diminish somewhat when high concentrations of trivalent chrome are present from a heavily used bath. In these cases, the rate may slow down to approximately 0.0005"/hour, indicating that the bath should be discarded.

Equipment

Polystrip 26 solutions may be used in plain steel tanks; linings are not necessary. Heaters, if used, may also be of plain steel, although stainless steel is generally preferred so as to prevent rusting above solution level. Adequate exhaust ventilation is necessary in order to remove the light mist generated during the stripping operation. Cathodes are normally fabricated of plain steel; the tank wall may also be used. Adequate rinsing must be accomplished both before and after Polystrip 26. The drag-in of chlorides from an HCL pickle must be avoided, since these chlorides can cause etching of parts in the strip bath. Good rinsing, after Polystrip 26, is necessary to avoid contamination of any subsequent operations. A mild air agitation will provide the optimum stripping of parts. Agitation should especially be used when making additions to the bath. Polystrip 26 is designed for use with air agitation.

Solution Foaming & Pitting

Certain electrolytic stripping solutions may foam during use. This is usually caused by water hardness and/or the presence of oils from the parts surface. In these cases, an addition of Anti-Foam #426, or other agent, may be required. The stripping process creates a natural foam blanket, which is desirable as it reduces fuming. Caution must be used, however, not to cause sparks near this foam blanket, as a small "hydrogen explosion" may occur. This is generally harmless, but may be alarming. Polystrip 26 is specially designed so as to avoid pitting of the substrate. Its relatively high alkalinity and concentration was chosen for this reason. Caution must be exercised not to allow the Polystrip 26 concentration to drop substantially or pitting may occur on certain ferrous alloys. Routine analysis and solution additions will prevent this.

Solution Additions

Polystrip 26 is a highly alkaline compound and, as such, caution must be exercised when making up a new bath or when making solution additions. Polystrip 26 compound must be added slowly and with sufficient agitation to avoid overheating. Routine and regular additions should be made to the bath, based upon analysis.

Caution

Polystrip 26 and its solutions are highly alkaline and can cause burns to skin or eyes. Avoid such contact. These are all industrial chemicals and must be handled carefully and in accordance with the directives provided in the individual SDS forms.

Read and understand the SDS on all of these chemicals before handling or using. Ensure that all regulatory standards are followed and limit personal exposure as required for Cr(VI) by OSHA.

Avoid personal contact with these chemicals, avoid splashing and avoid breathing any fumes released during operation. Do not inhale any dust, mist or vapors from these chemicals. Do not allow these products to contact the skin or eyes. In case of contact, flush immediately with large amounts of fresh water and seek immediate medical attention.

Wear protective clothing such as aprons, gloves, face masks and respirators. Be sure that adequate eyewashes and emergency showers are available nearby before handling or using any of these chemicals.

Designated work clothing should be worn while using these chemicals and the worker(s) should thoroughly shower and change into fresh-clean street clothing before going home. Decontaminate all work clothing before reuse.

The user is responsible for providing adequate work clothing, personal protection, and limiting personal exposure and providing any required clean-up, decontamination as well as any needed medical attention.