A BRITE COMPANY
A GOOD START BEGINS WITH AN A BRITE FINISH!

Technical Data Sheet

BRITEGUARD TRIDIP 105™

- ***Consistent, highly polished, uniform deep blue-bright finish.***
- ***Longer bath life.***
- ***Can be used to produce blue-bright or yellow finishes***
- ***Less strip back.***
- ***Easier to waste treat.***
- ***Excellent corrosion resistance.***
- ***Ideal for all zinc electrolytes.***
- ***High tolerance to impurities (iron) and yellowing.***

MULTI-PURPOSE TRIVALENT CHROMATE CONVERSION COATING FOR ZINC

TRIDIP 105 is a specially formulated liquid trivalent chromate conversion coating for all electro-deposited zinc surfaces.

TRIDIP 105 provides a highly polished surface while passivating zinc surfaces leaving a more pronounced blue finish than conventional trivalent chromates. The results are a more consistent blue-bright finish that is reproducible load after load.

TRIDIP 105, when used in conjunction with ***BRITEGUARD Yellow 133*** and ***BRITEGUARD RP-81***, provides a high corrosion resistant trivalent yellow conversion coating. However since the degree of protection is very dependent upon the surface of the base metal plated, results will vary from installation to installation.

TRIDIP 105 offers much higher tolerance to impurities resulting in far less discoloration and yellowing associated with co-deposited iron. Also, far fewer problems are encountered with zinc stripping from low current densities due to its low zinc removal properties.

OPERATING DATA

Blue-Bright Application

	Range	**Optimum**	**Improved Corrosion Protection**
TRIDIP 105	1.5-2.5%/vol.*	2%	5-10%/vol.
Temperature	65-95° F. (18-35° C)		
Time	10-30 seconds.		
pH	1.5-3.0		
Agitation	Mild air		

Trivalent Yellow Chromate

	Range	**Optimum**
TR IDIP 105	1-3%/vol.	2%/vol.
TRIDIP 133	2-6%/vol.	4%/vol.
Temperature	65-95° F. (18-35° C)	
Time	20-60 seconds. (Tridip 105 chromate)	30 sec.
	45-60 seconds. (Tridip 133 dye)	
pH	1.6-2.5	2.0
Agitation	Mild air	
RP-81 or 89* (optional seal)	4-12%/ vol.	10%/vol.

- Refer to the ***BRITEGUARD RP-81 or 89*** Technical Bulletin for more information on proper use of the product. This seal can be used on both clear and yellow finishes.
- ***TRIDIP 133*** can be used either *in* the ***Tridip 105*** or as a separate dye *after* ***TRIDIP 105***. When used *in* the ***Tridip 105*** used at 4%/volume. Contact the *A Brite Technical Service Laboratory* for recommendations for your specific application.

EQUIPMENT

PVC, Koroseal, lined steel, plastic, polyethylene, or polypropylene tanks. Heating coils of teflon are recommended.

pH CONTROL

TRIDIP 105 solution pH will be about 1.5 when made up using 2% by volume. Under normal usage, the pH should be maintained between 1.5 and 2.0. Always use TRIDIP 105 to adjust pH downward. Do not use acid!

COLOR CONTROL (Bluebright)

TRIDIP 105 will maintain a deep blue color under most circumstances. However, the blue color of the chromate film depends on pH, immersion time and chromate concentration.

- When using at concentrations of 10% by volume keep pH at 2.6-3.0.
- A yellowing of the deposit after chromating is usually an indication of high pH.
- Lower pH with additions of ***TRIDIP 105*** not acid.
- When encountering a less blue and more of a yellowing appearance, adjustment of one or all of the above mentioned factors will almost always correct color.
- Keep in mind that the temperature and cleanliness of the final rinse and drying temperature are also important in obtaining proper color be it blue or yellow.
- Do not rinse processed work in water that contains hexavalent chrome.
- All chromate films are soft when wet and should not be abraded or handled. Coatings offer the maximum corrosion resistance and hardness in about two to three days. Drying is best done by warm (not hot) air or centrifugal dryer.
- ***BRITEGUARD ZD-270*** or ***271L*** or a 0.25-0.5% by vol. of nitric or sulfuric acid dip should be used prior to chromating to remove organic filming due to high brightener or bath organic contamination. This will insure the proper adhesion of the film and brighten the surface.
- Tank should be checked once per shift to remove any parts that might have fallen off the racks during processing. The chromate solution will continue to react on the parts and contribute to shorter bath life and higher costs.
- The appearance and corrosion resistance of the chromate film depend upon many factors in both the chromate and the plating bath as well as rinsing between the plating bath and the chromate. Following the suggestions in this literature will help to insure maximum performance.

STORAGE/HANDLING

TRIDIP 105 is an industrial chemical. Avoid storing with combustible materials. Keep containers closed when not in use***.*** ***TRIDIP 105*** solutions require the handling of trivalent chrome bearing compounds. Avoid contact with skin and eyes. Wear proper protective clothing and safety gear. ***Refer to the Material Safety Data Sheet for more complete information before using this product.***

WARRANTY

The information presented herein, while not guaranteed, is to the best of our knowledge true and accurate. No warranty or guarantee expressed or implied is made regarding the performance of any products, since the manner of use is beyond our control. No suggestion for product use nor anything contained herein, shall be construed as a recommendation for its use in infringement of any existing patent, and we assume no responsibility or liability for operations which do infringe any such patents. The above includes confidential and proprietary information of ***A BRITE*** and is furnished to you for your use solely on products or processes supplied to you by us.

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