



BetzDearborn Permatreat™ 2550

Non-Chrome Passivation Treatment

- > Provides corrosion protection
- > Can be spray, roll coat, squeegee, or immersion-applied
- > Free of chrome and other heavy metals
- > Operates at ambient temperature
- > Staining is virtually eliminated
- > Eliminates chrome contamination in downstream processes
- > Can be alkaline cleaned, pretreated and painted
- > Curing PMT not required.

DESCRIPTION AND USE

Permatreat™ 2550 process is used to produce a corrosion resistant coating on HDG, EG and Galvalume® substrates. The coating produced is colorless. Permatreat 2550 is designed for the continuous coating of coil by either spray or immersion processing.

SUMMARY OF OPERATING DATA

Coating Bath Makeup

For each unit volume of bath, add the appropriate amount of Permatreat 2550 to the DI water while stirring or with the pump circulating:

Unit Volume	Permatreat 2550
100 gal	5 to 15 gal

Normal Operating Controls

Product %:	5 to 15
Temperature:	70 to 120°F
Treating Time:	Optional

MAINTENANCE OF THE BATH

The Permatreat 2550 bath is controlled by acid titration. The procedures are available from GE Infrastructure Water & Process Technologies. For each % lacking, add one gal of Permatreat 2550 per 100 gal of bath. The feed of Permatreat 2550 can be automated through the use of GE AccuTrak™ conductivity control equipment.

OPERATIONAL RECOMMENDATIONS

1. After applying the Permatreat 2550 solution by the preferred method, the excess solution is removed by running it through squeegee rolls which are properly adjusted to leave the desired film thickness. Reverse roll coating is an ideal way to apply Permatreat 2550. ***It is important not to exceed 10 mg/ft², in particular, for prepaint applications where alkaline removal is necessary.***
2. Permatreat 2550 should be applied at coating weights of 5 to 10 mg/ft². Coating weights are measured by a strip/photometer procedure. This procedure is available from GE.
3. As metal is processed in a bath of Permatreat 2550, the bath may build up in zinc content. When this value approaches its recommended maximum for efficient operation, a portion of the bath should be dumped and recharged with fresh material. Alternatively, a small steady bath overflow may be established.
4. The initial charge and replenishment data contained herein are normal for most installations; however, a GE rep-

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Water Technologies

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representative may suggest a deviation from this data if indicated by local conditions.

5. It is essential that the metal strip leaving the chemical applicator be dried as soon as possible by any means that does not contaminate the surface with fumes, oil or partially burnt gases. A warm air flow or the use of infrared or gas-fired heating panels is the preferred drying method. Any air flow necessary to aid drying should be limited to a maximum velocity of 3000 ft/min.

EQUIPMENT NOTES

The equipment for the Permatreat 2550 coating chemical stage should be constructed of stainless steel or plastics.

PACKAGING INFORMATION

Permatreat 2550 is available through the unique ChemSure™ Delivery Services. ChemSure is safe, reliable, easy to use and environmentally compliant. GE offers four universal delivery systems: Bulk, Custom-Bulk, Semi-Bulk, and Mini-Bulk. The containers are available in a variety of styles and sizes to accommodate different applications. GE also offers a variety of other packages including drums and pails. Ask your representative for more details.

STORAGE

Permatreat 2550 freezes at 23°F. If it freezes, simply warm and mix thoroughly prior to use. It is recommended that the product be kept from freezing and stored in a cool, dry place.

MATERIALS

The following chemical is needed to operate the process and can be obtained from GE:

> Permatreat 2550

SAFETY PRECAUTIONS AND PROPERTIES

Material Safety Data Sheets containing detailed information relative to this product are available upon request.

METRIC CONVERSION FACTORS

To convert any of the English units in this Product Fact Sheet into their metric equivalents, use the appropriate conversion factors:

$$\text{gal} \times 3.785 = \text{liters}$$

$$\text{lb} \times 0.454 = \text{kg}$$

$$\text{psi} \times 6.7 = \text{KPa}$$

$$(\text{°F} - 32) \div 1.8 = \text{°C}$$