Chem Strip 5011

Chem Strip 5011 is a liquid alkaline product formulated to strip paint from steel, copper, brass, bronze and magnesium in immersion tanks.

PRIMARY APPLICATION

Chem Strip 5011 is a liquid, highly alkaline product formulated to strip paint from steel, copper, brass, bronze and magnesium in immersion tanks. A highly concentrated blend of alkalies, wetting agents, and accelerators, it rapidly attacks and breaks the bond between the metal and the most resistant paint finishes. Because its accelerators do not rapidly boil away, Chem Strip 5011 provides longer than normal solution life and can hold more paint sludge and keep on working. Chem Strip 5011 has a seal layer which retards evaporation, reducing energy and maintenance costs.

CHEMICAL CHARACTERISTICS

- Physical form: clear amber liquid
- Bulk density: 11.29 lbs./gal
- Specific gravity: 1.355
- Flash point: >200°F
- Vapor pressure: <1mmHg
- VOC: 105 gr/ℓ

PROCESS SEQUENCE

Tank 1: Paint removal in Chem Strip 5011.
Tank 2: Water rinse.

METHOD OF USE

Chem Strip 5011 is mixed with water at a concentration of 10% to 50% by volume, i.e., 10 gallons to 50 gallons for each 100 gallons of solution (2.0 to 10.0 titration points) and then heated from 180° to 220°F. Parts are immersed for as long as necessary. Time will depend upon the type and amount of paint to be removed. The parts are then rinsed with water for 30 to 60 seconds. Tanks, heating coils, and baskets can be constructed of mild steel.

NOTE

These instructions are based upon standard industrial use. Some production operations may require other operating instructions. The Chemetall Representative will recommend the best way to use this product based upon production requirements.
SPECIAL NOTES

Chem Strip 5011 is a highly alkaline product with an operating pH of 12-13. Do not use it to clean aluminum, zinc or galvanized metal. Agitation of the solution enhances and speeds up the stripping ability of Chem Strip 5011.

Initial Charge

Before charging the holding tank with Chem Strip 5011, make sure it is clean and free of debris, paint skins and sludge.

Fill the holding tank 1/4 to 1/2 full with room temperature water. Do not heat above 100°F. Slowly pour in the required amount of Chem Strip 5011. Add more water, if necessary, to fill the holding tank to operating capacity. Heat the solution to operating temperature.

MAINTENANCE

The concentration (and occasionally the pH) of the Chem Strip 5011 solution must be monitored to achieve the best results. Use the following titration procedure to determine concentration and replenish as indicated. Perform this at the start of every shift, or more frequently, if production is heavy.

Concentration

1. Take a representative sample of the Chem Strip 5011 solution from below its floating layer. If this sample contains a large amount of paint solids, allow it to settle or filter it.
2. Using a pipette, take 1.0 ml of this sample and place it in a beaker.
3. Add 3 drops of phenolphthalein indicator to this sample.
4. Fill a graduated pipette to the 5 ml mark with 0.5N hydrochloric acid.
5. Drop by drop, add it to the beaker, gently swirling, until the solution changes from red to colorless. Note the number of ml used; these are called points of titration.
6. Compare these points to the initial points in the table below:

<table>
<thead>
<tr>
<th>Initial Points</th>
<th>Initial Concentration (gal/100gal) % bv</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>10</td>
</tr>
<tr>
<td>3.0</td>
<td>15</td>
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<tr>
<td>4.0</td>
<td>20</td>
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<tr>
<td>5.0</td>
<td>25</td>
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<td>6.0</td>
<td>30</td>
</tr>
<tr>
<td>7.0</td>
<td>35</td>
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<tr>
<td>8.0</td>
<td>40</td>
</tr>
<tr>
<td>9.0</td>
<td>45</td>
</tr>
<tr>
<td>10.0</td>
<td>50</td>
</tr>
</tbody>
</table>
7. Add 5.0 gallons of Chem Strip™ 5011 for each 100 gallons to bring the solution strength up 1 titration point. Or multiply the points by 5.0 to determine the solution’s concentration in percent by volume; e.g., 5 points x 5.0 = 25% bv.

NOTE: Chemetall can supply the Titration equipment and reagents needed to perform the above test.

pH

Normally, the pH will remain stable. If problems occur and the concentration and temperature are within range, check the pH to verify that it is correct.

SAFETY AND HANDLING

Prior to handling and use of any of the materials referenced in this document, the Material Safety Data Sheets should be read and understood by all personnel in contact with these materials.

KEEP OUT OF REACH OF CHILDREN

STORAGE

Dry indoor storage at temperatures between 40° F. and 100° F. is recommended, away from any incompatible materials referenced in Material Safety Data Sheets. All containers should be kept tightly closed when not in use.

DISPOSAL

Any disposal of the materials referenced in this document should be in accordance with all applicable federal, state, and local regulations. Process solutions can contain components other than those present in the materials as supplied. Analysis of process solutions may be required prior to disposal.