

## Technical Data Sheet • CHEMEON® FSO

### Description:

An inorganic gold dye for anodized aluminum that provides excellent stability and weatherability.

### Operating Conditions:

|                        |                                                       |
|------------------------|-------------------------------------------------------|
| Method of Application: | Immersion                                             |
| Concentration:         | 3 - 8 % by volume                                     |
| Temperature:           | 120 - 140° F (50 - 60 °C)                             |
| Time:                  | 1 - 10 minutes                                        |
| pH:                    | 4.0 – 5.0                                             |
| Tank material:         | Stainless Steel (304), Polypropylene,<br>Polyethylene |

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Concentration: . 5% v/v  
Time: 5 min

Higher pH and temperature shorten coloring time but shorten bath life.  
Stronger concentrations and longer times provide darker colors.  
To control pH, use Sodium Hydroxide to raise the pH and CHEMEON® Chemical 5100 to lower the pH.

### Solution Control:

1. Pipet 25 mL of filtered bath sample into a 250 mL iodine flask.
2. Add 10 mL of 50 % sulfuric acid, 50 mL of hot water, 10 drops of molybdate solution and 20 mL of 10% by weight KI solution.
3. Stopper flask and heat at 120-140° F for 30 minutes.
4. Cool to room temperature and titrate with 0.1 N sodium thiosulfate until a light straw color is obtained.
5. Add 2 mL of starch indicator and titrate to a colorless endpoint that persists for 30 seconds.
6. Record mL of 0.1 N sodium thiosulfate necessary to reach the endpoint.
7. Calculation:

$$\text{CHEMEON® FSO (\% by volume)} = (\text{mL of 0.1 N sodium thiosulfate}) \times 0.77$$

### Physical and Safety Data:

CHEMEON® FSO is a clear to slightly cloudy green liquid.  
CHEMEON® FSO is slightly acidic and poisonous.  
Do not take internally.  
In case of skin contact, flush with water for 15 minutes.



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### **Packaging:**

55 gallon non-returnable drum

### **Storage:**

CHEMEON® FSO should be stored in a cool, dry area away from alkaline material. Keep container closed when not in use.

### **Waste Disposal:**

CHEMEON® FSO may require neutralization to a specified pH range depending on Federal, State, and local waste treatment regulations.

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