

**TC-11<sup>®</sup> Corrosion Inhibitor**

**Versus**

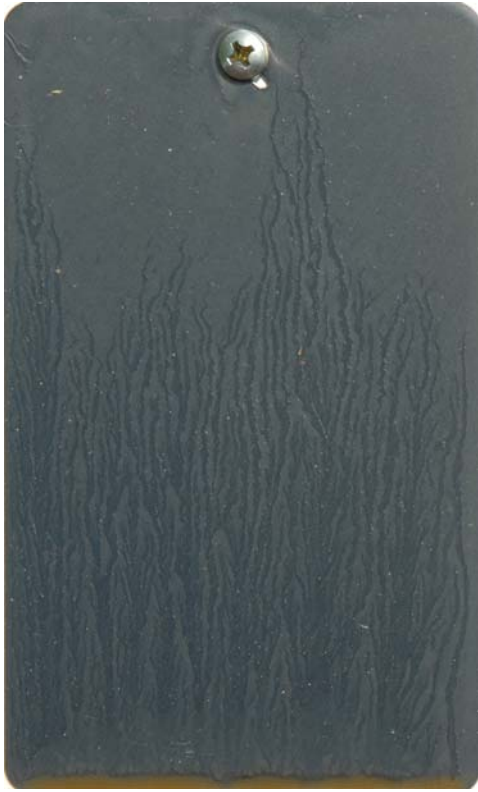
**CRC<sup>®</sup> 3-36, CRC 6-56, and CRC  
Heavy Duty Silicone**

**July 2006**

# **Corrosion Test Methodology**

- 1. Identical Type S Steel Q-Panels are chemically cleaned and treated once with a competing product.**
- 2. The Q-Panels are mounted in a vertical position for 24-hours.**
- 3. The Q Panels are mounted on a test panel.**
- 4. The Q-Panels are exposed to identical environmental exposures – full tropical sunlight, intermittent rainfall, a salt breeze, and a nightly condensation cycle.**
- 5. The Q-Panels are photographed at 24-hour intervals using sunlight as the light source.**

# Start of Test



**TC-11**



**CRC 3-36**



**CRC 6-56**



**CRC Silicone**

# Day One



**TC-11**



**CRC 3-36**

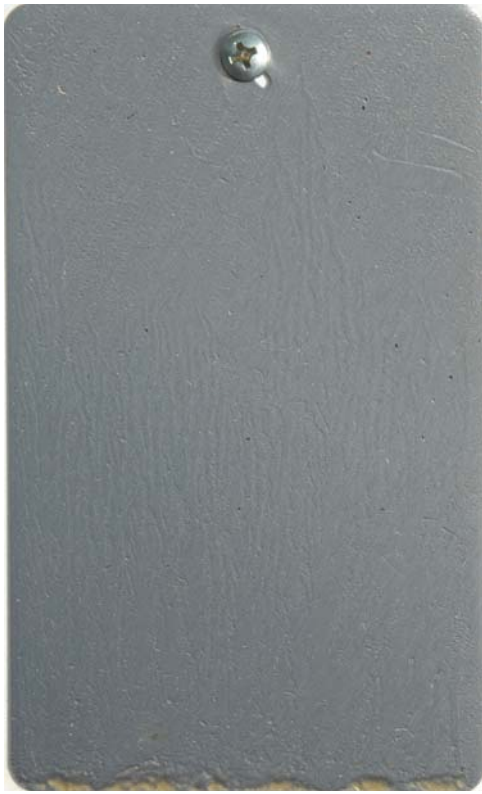


**CRC 6-56**



**CRC Silicone**

# Day Two



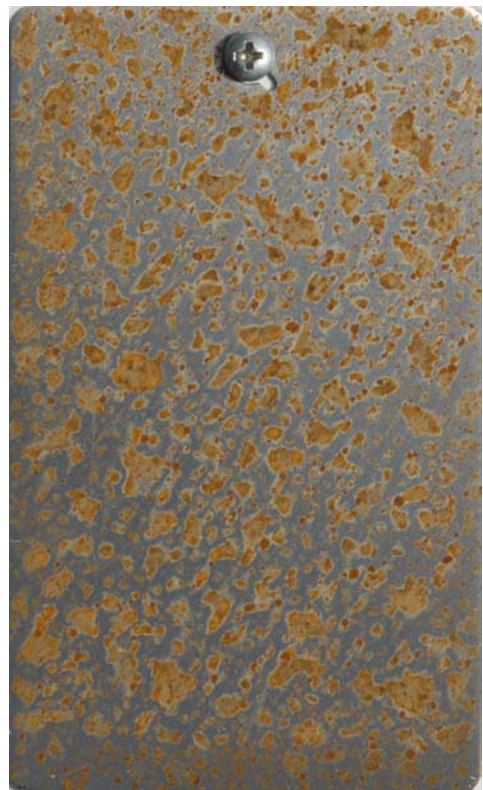
**TC-11**



**CRC 3-36**



**CRC 6-56**



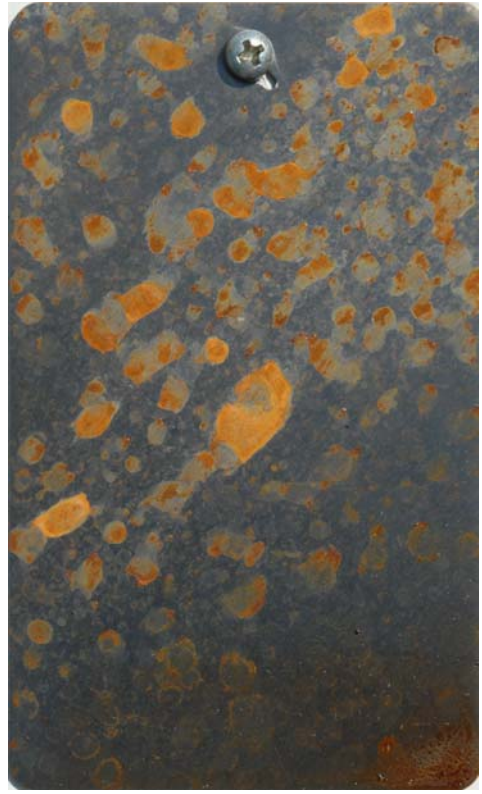
**CRC Silicone**



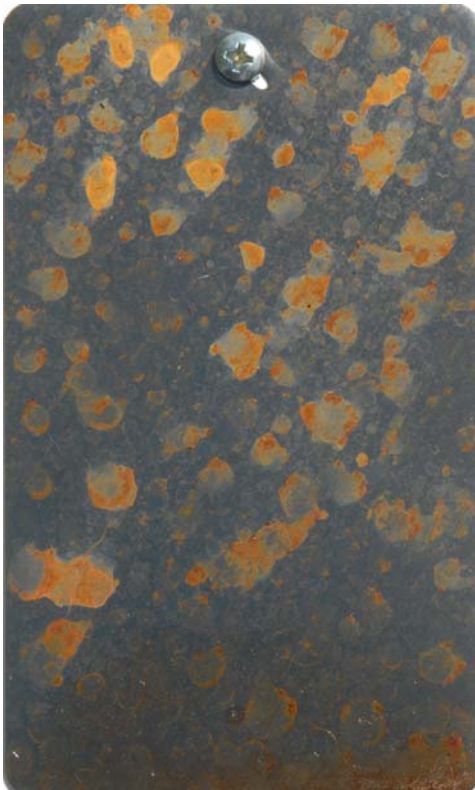
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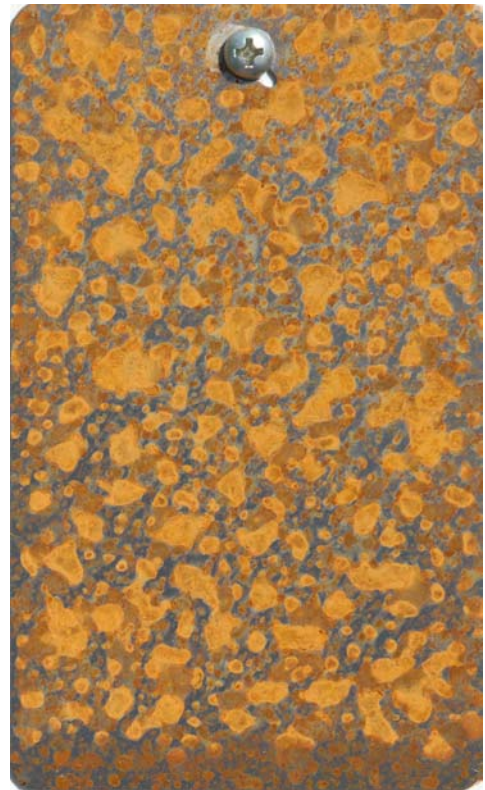
**TC-11**



**CRC 3-36**



**CRC 6-56**

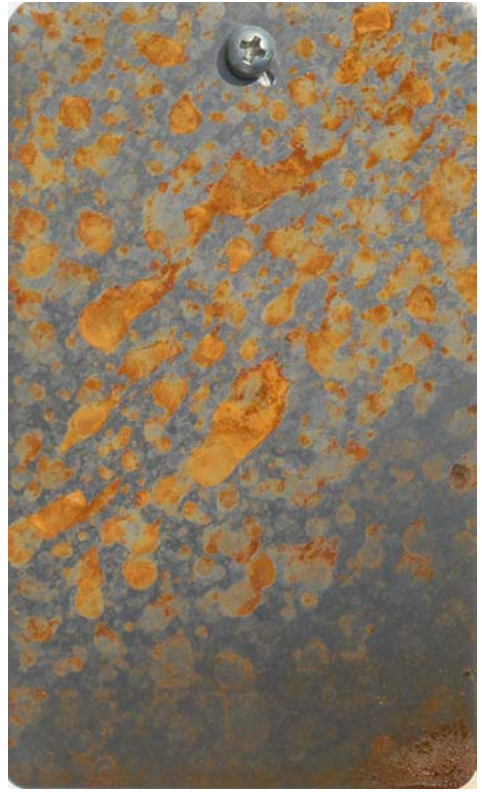


**CRC Silicone**

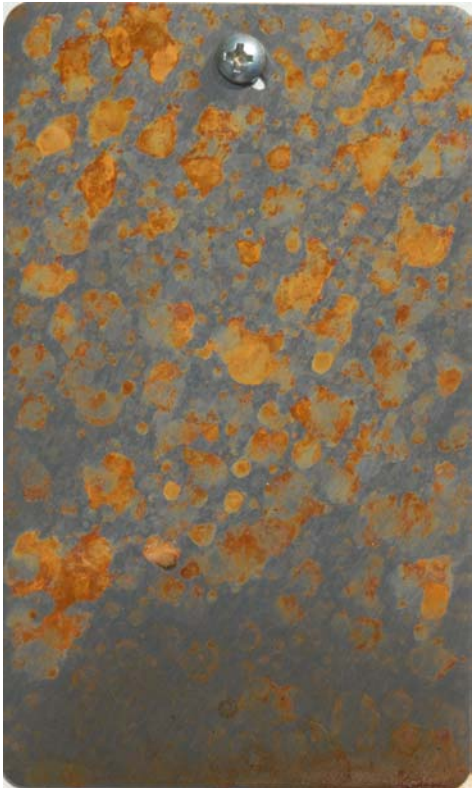
# Day Four



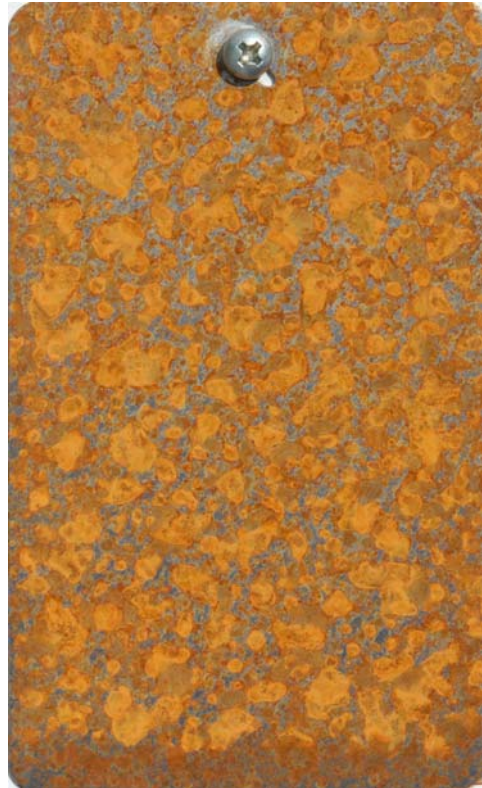
**TC-11**



**CRC 3-36**



**CRC 6-56**



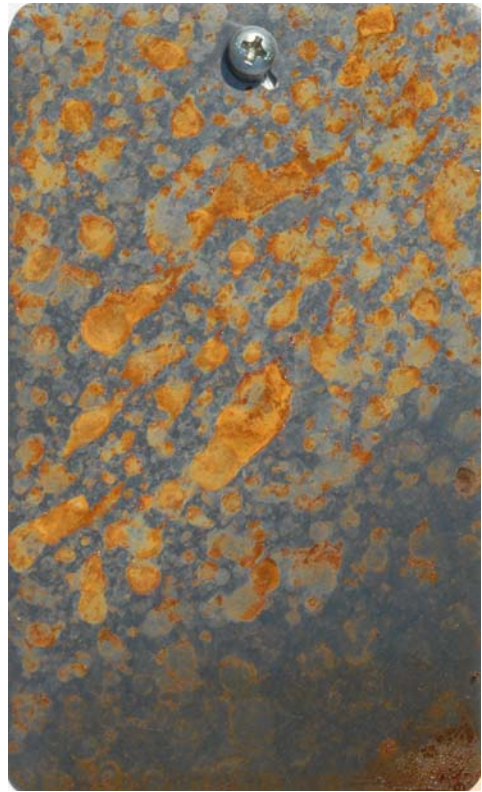
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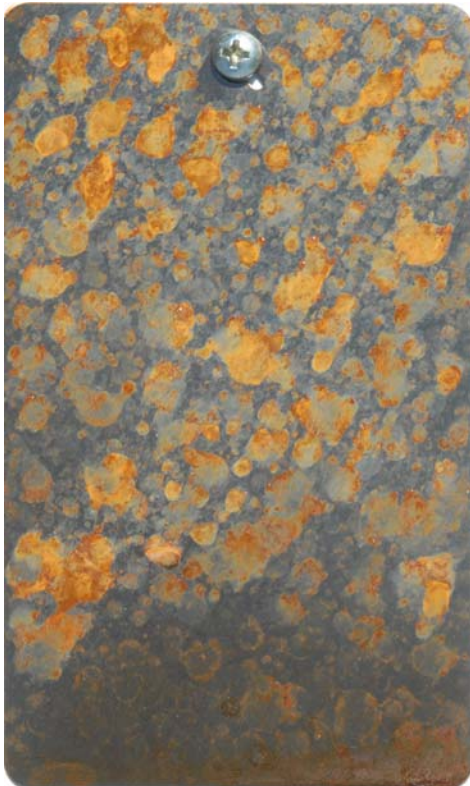
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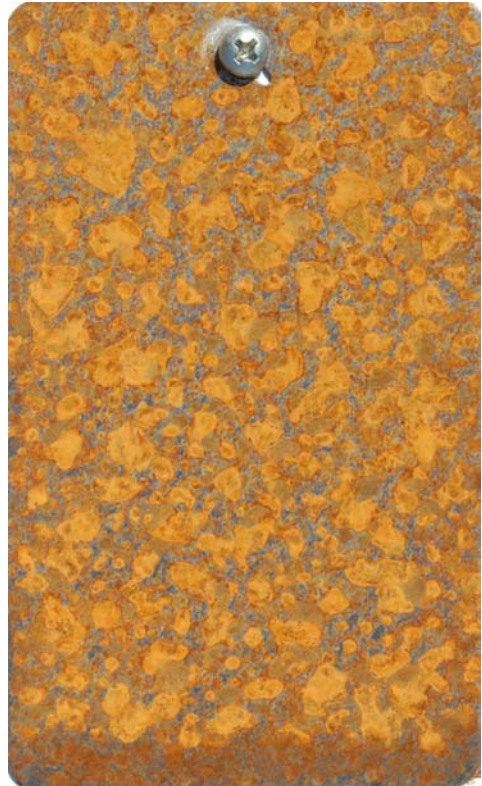
**TC-11**



**CRC 3-36**



**CRC 6-56**



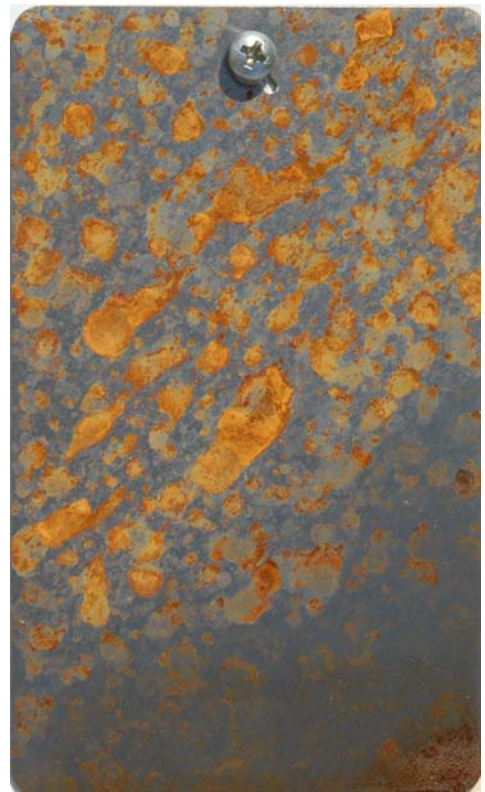
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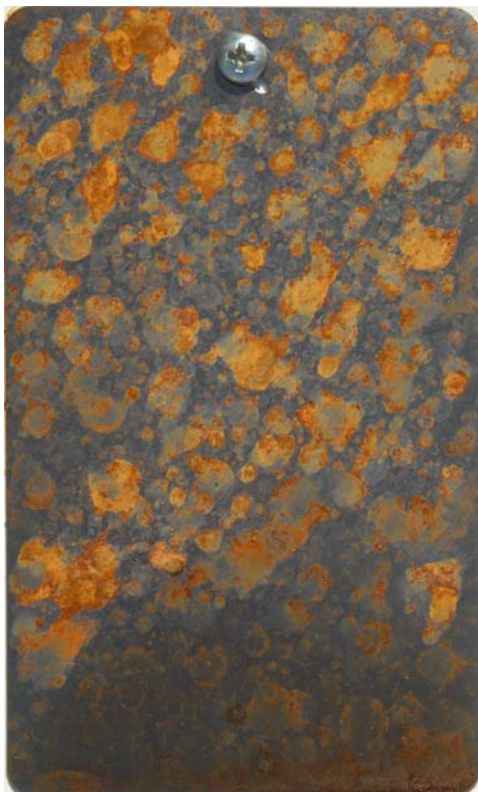
# Day Six



**TC-11**



**CRC 3-36**



**CRC 6-56**



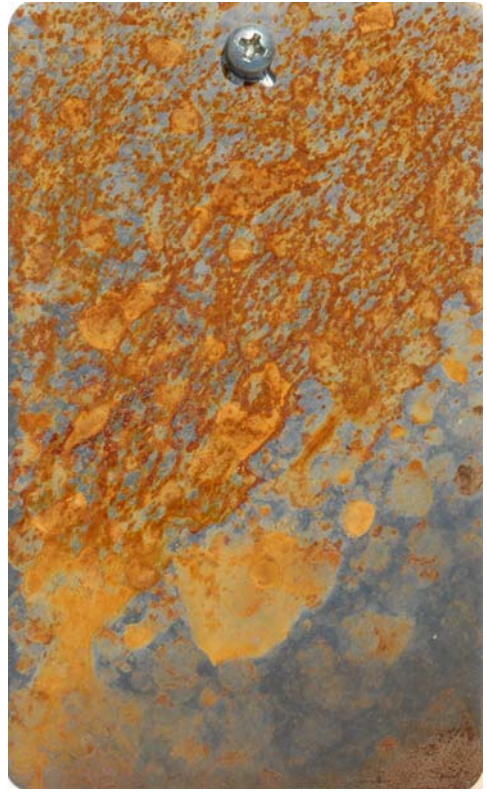
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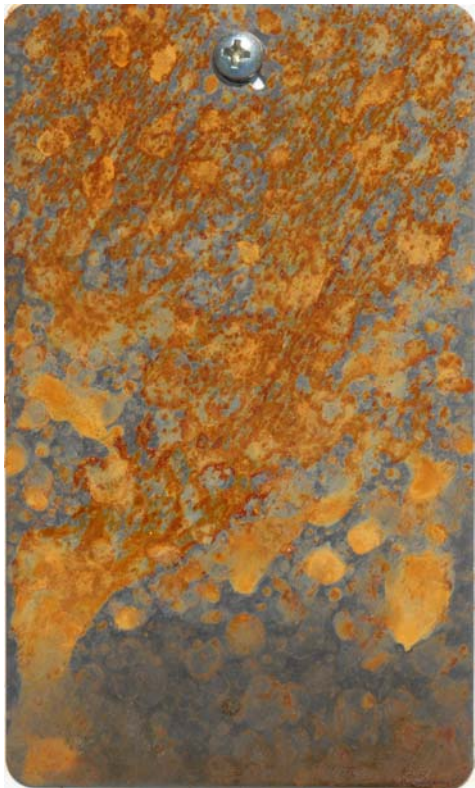
# Day Seven



**TC-11**



**CRC 3-36**



**CRC 6-56**



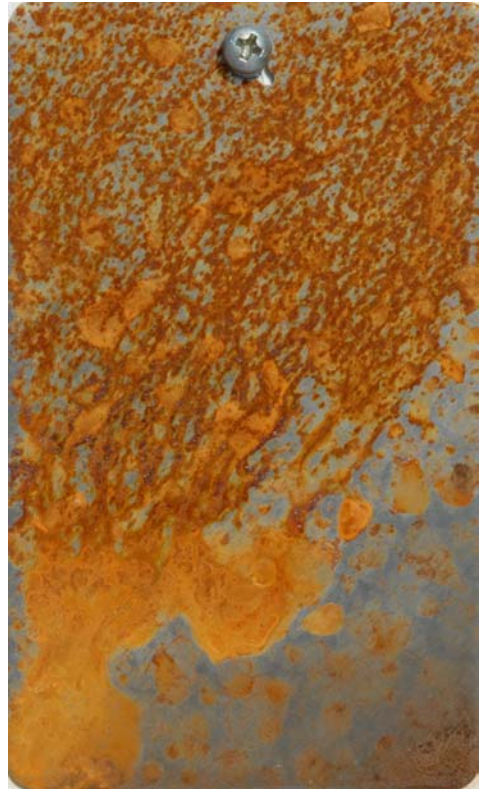
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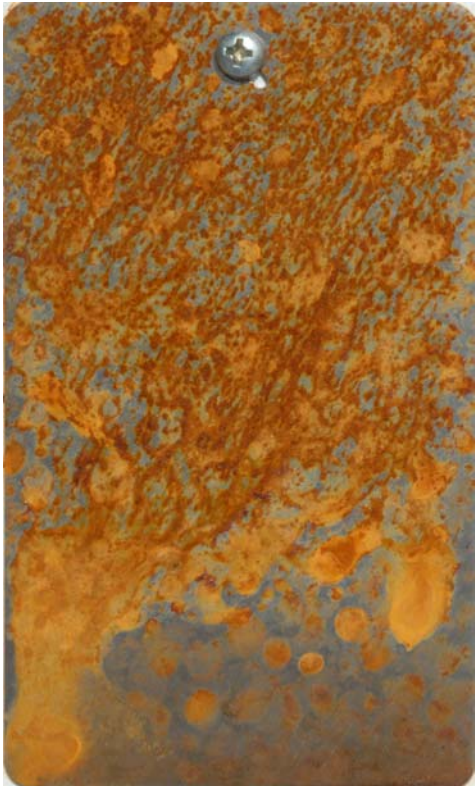
# Day Eight



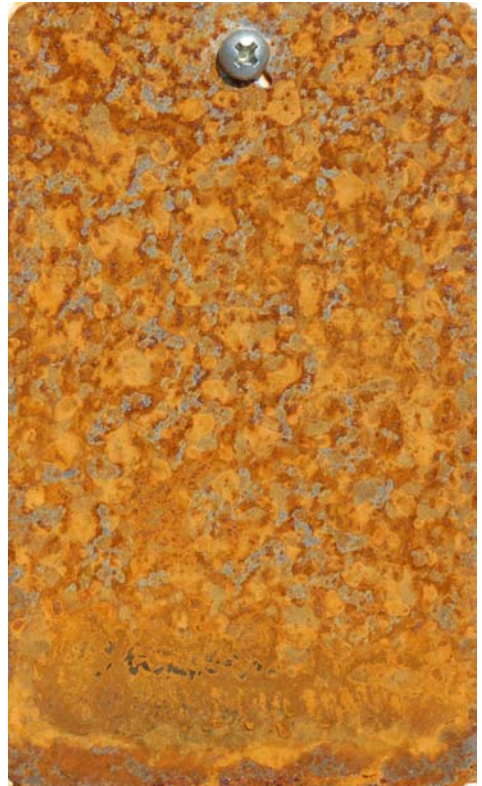
**TC-11**



**CRC 3-36**



**CRC 6-56**



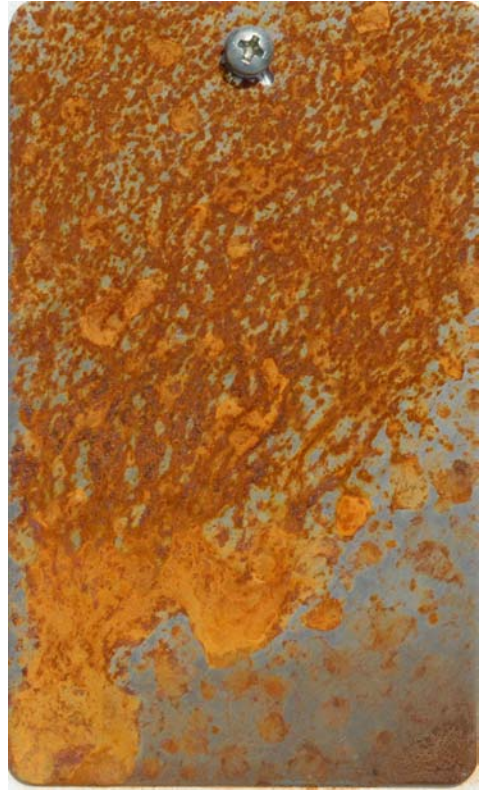
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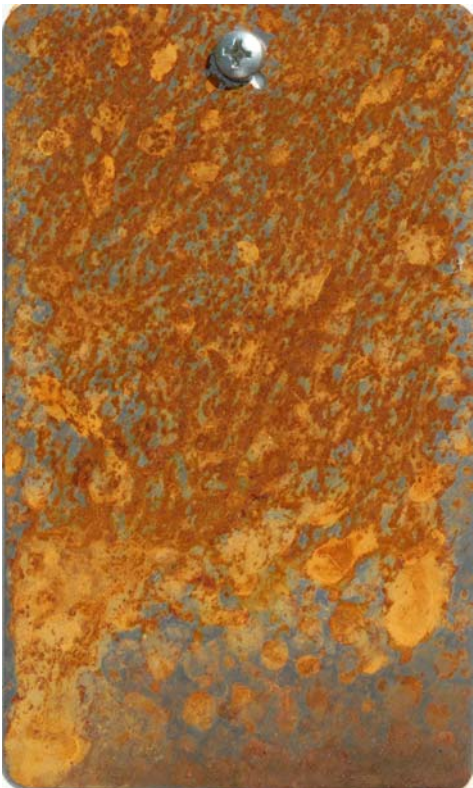
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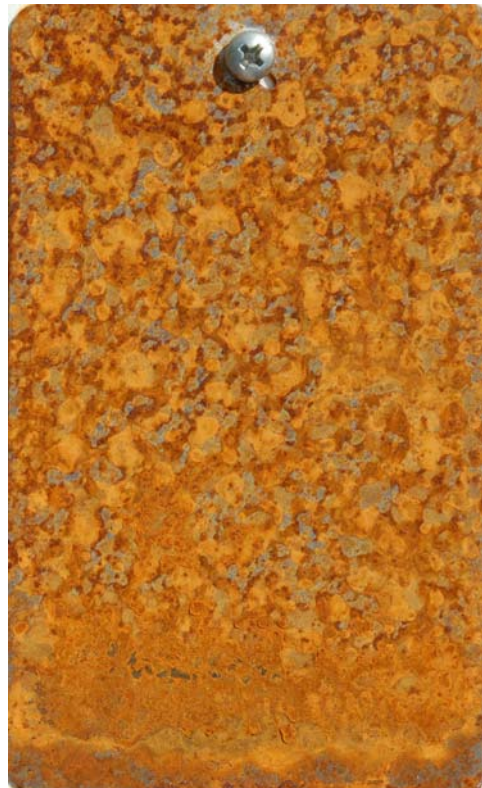
**TC-11**



**CRC 3-36**



**CRC 6-56**



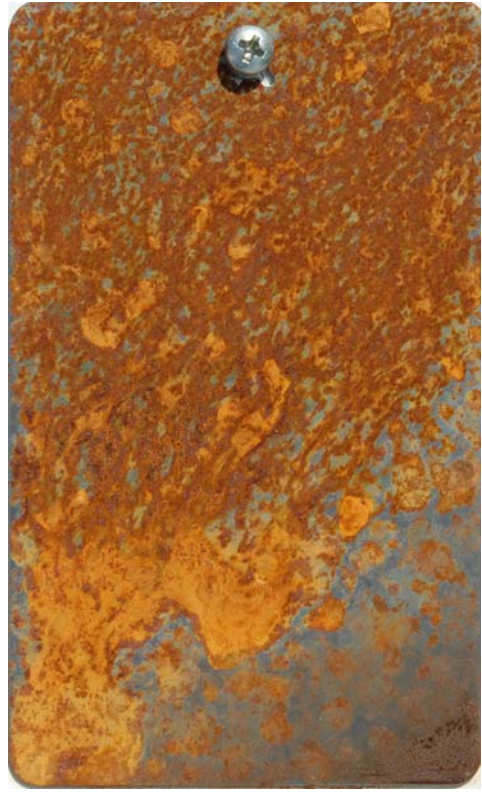
**CRC Silicone**



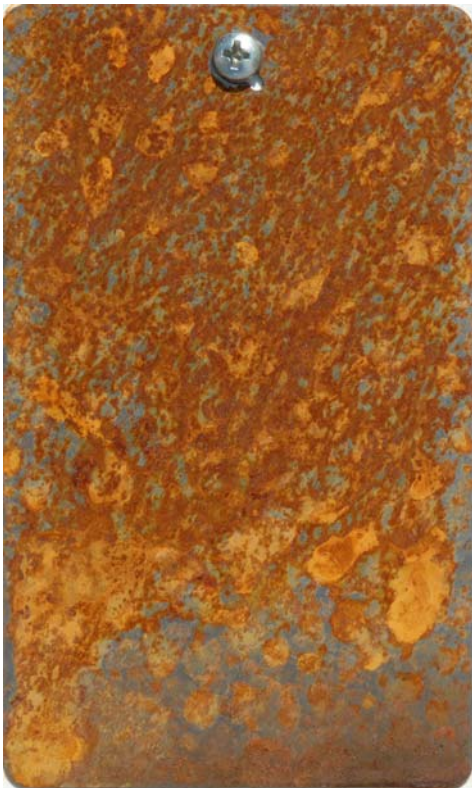
# Day Ten



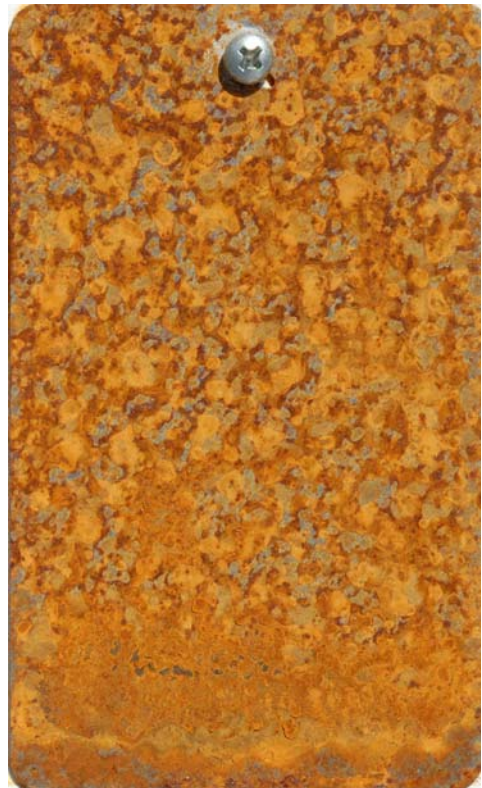
**TC-11**



**CRC 3-36**



**CRC 6-56**



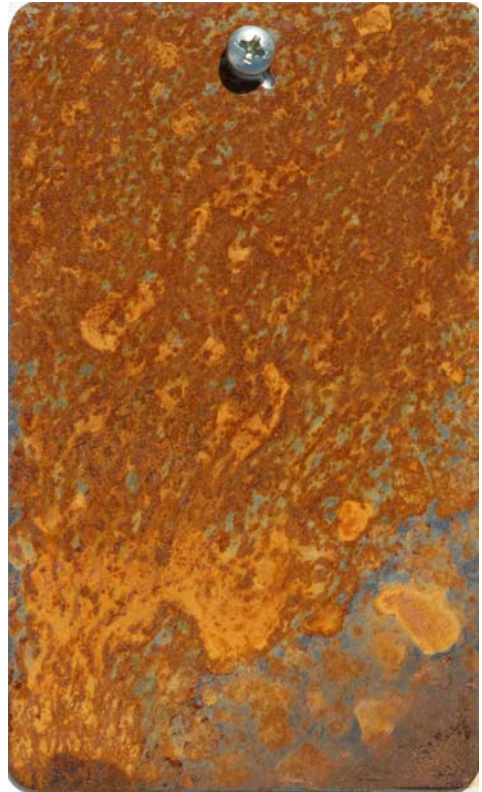
**CRC Silicone**



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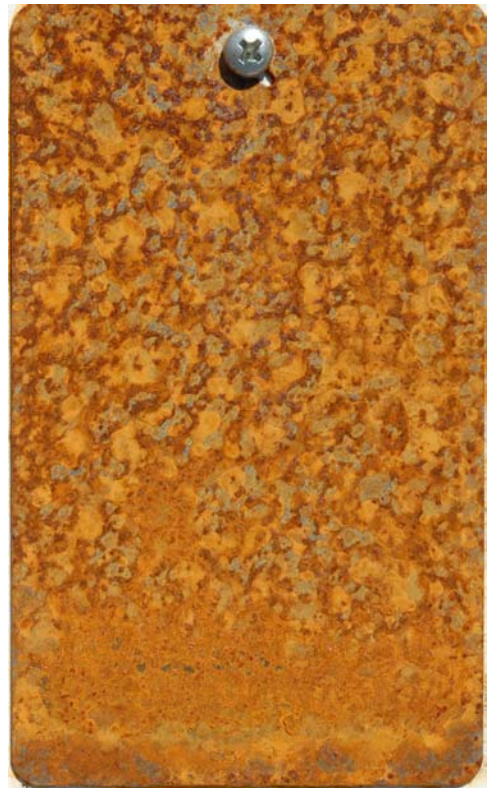
**TC-11**



**CRC 3-36**



**CRC 6-56**



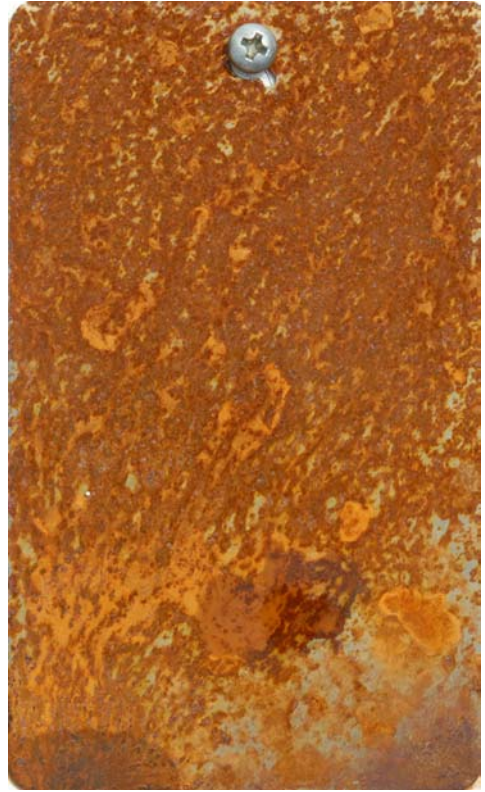
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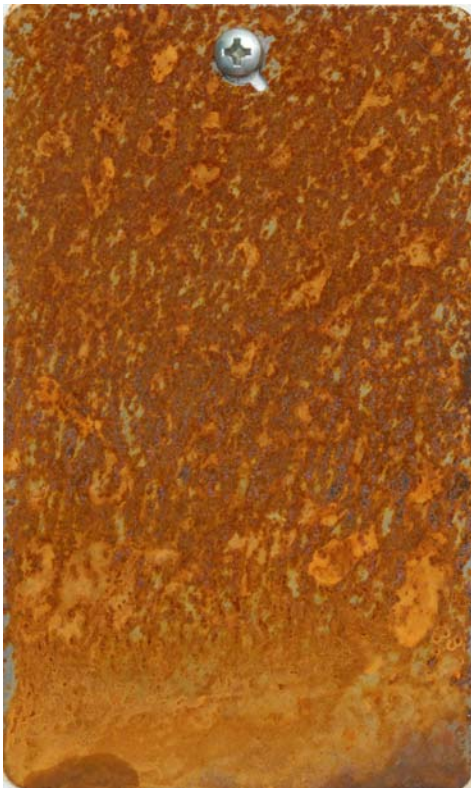
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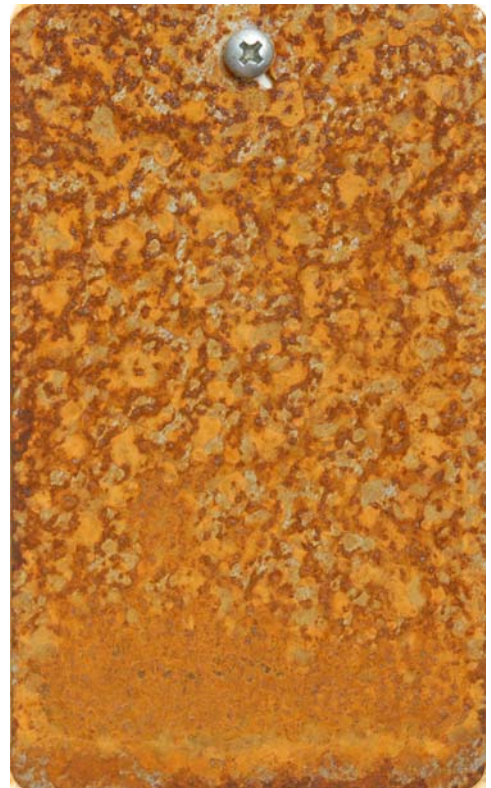
**TC-11**



**CRC 3-36**



**CRC 6-56**



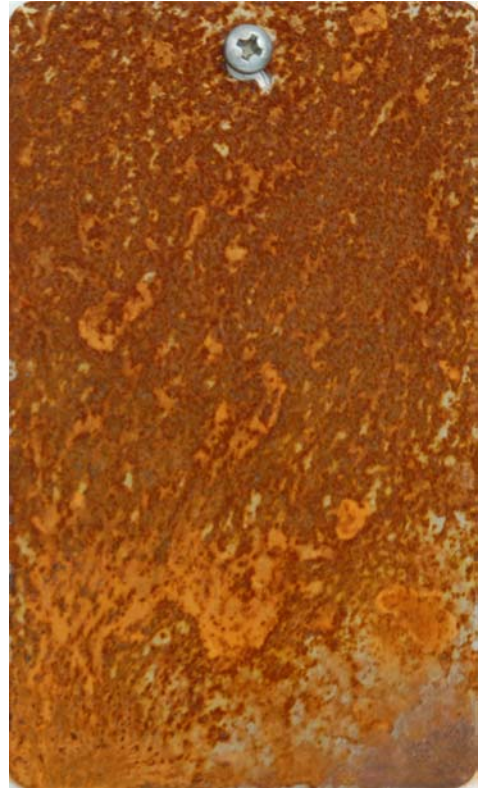
**CRC Silicone**



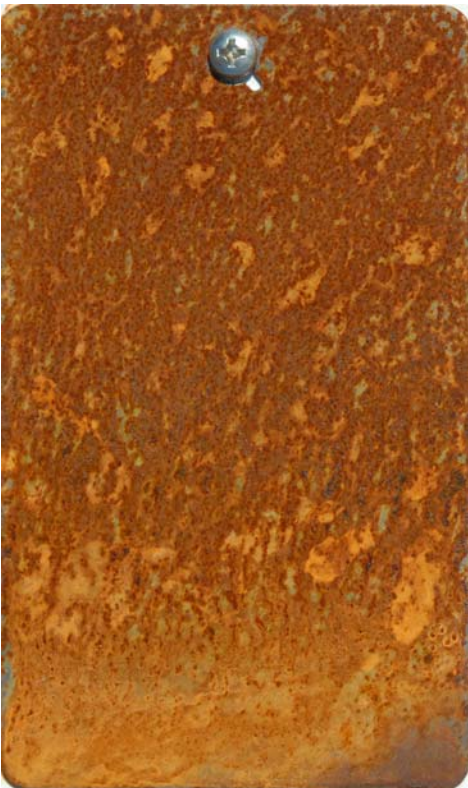
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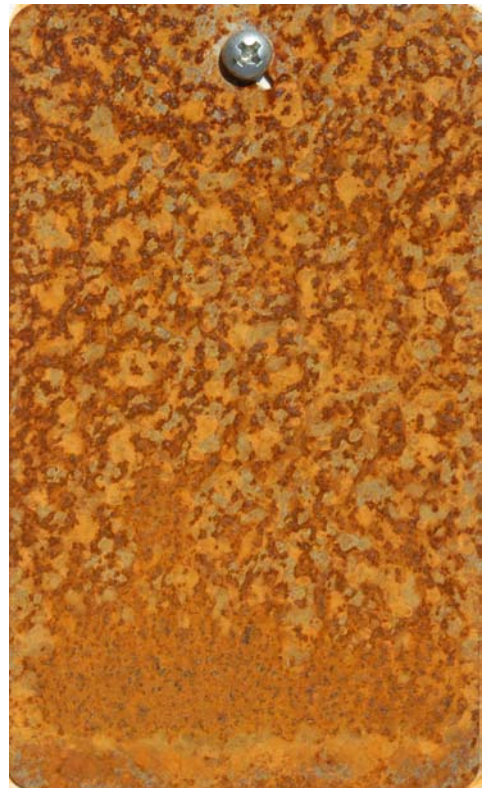
**TC-11**



**CRC 3-36**



**CRC 6-56**



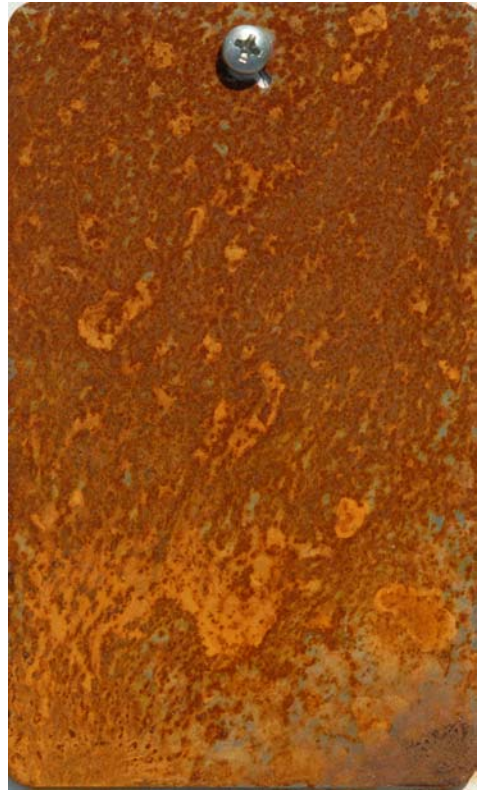
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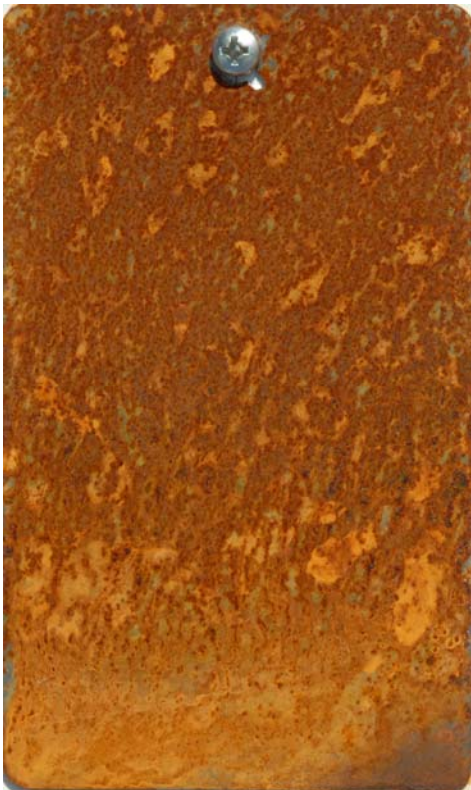
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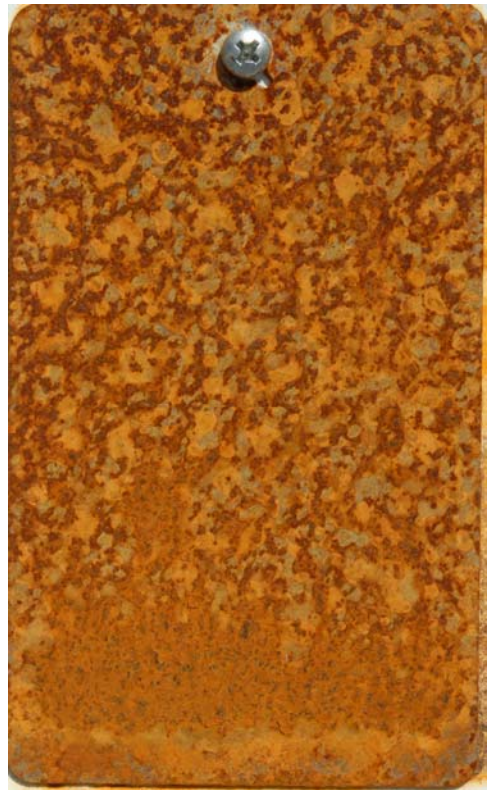
**TC-11**



**CRC 3-36**



**CRC 6-56**



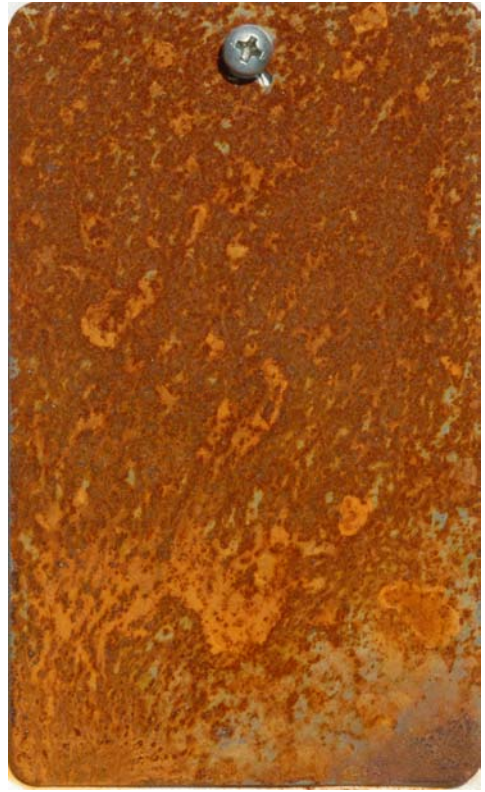
**CRC Silicone**



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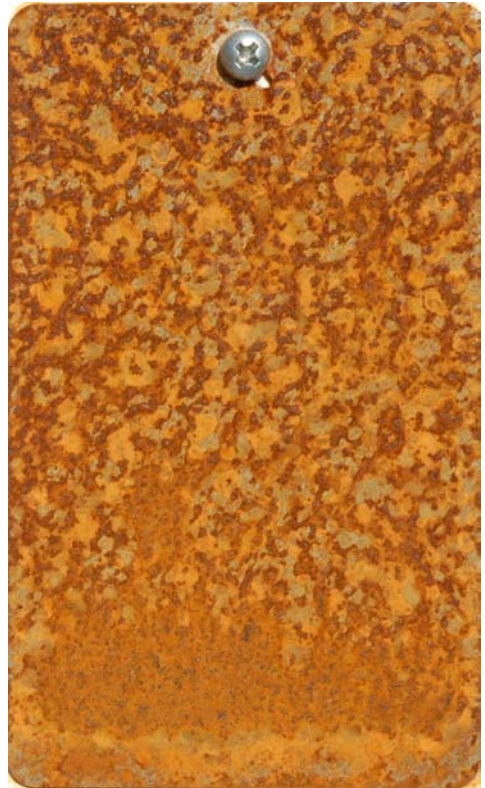
**TC-11**



**CRC 3-36**



**CRC 6-56**



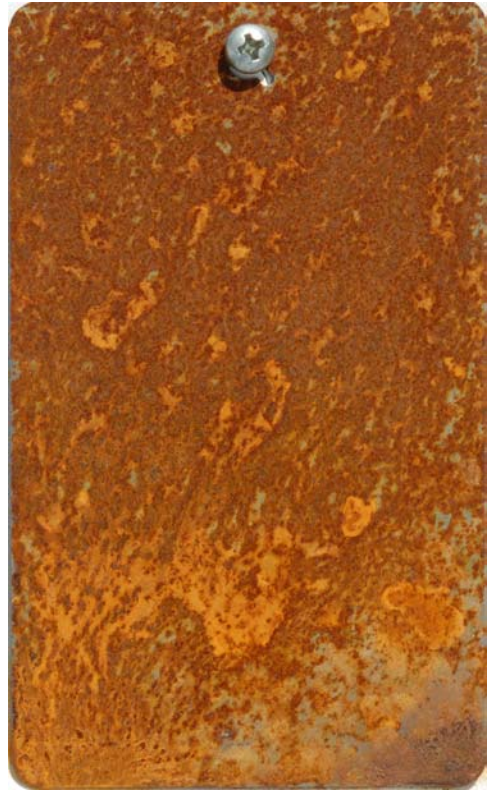
**CRC Silicone**



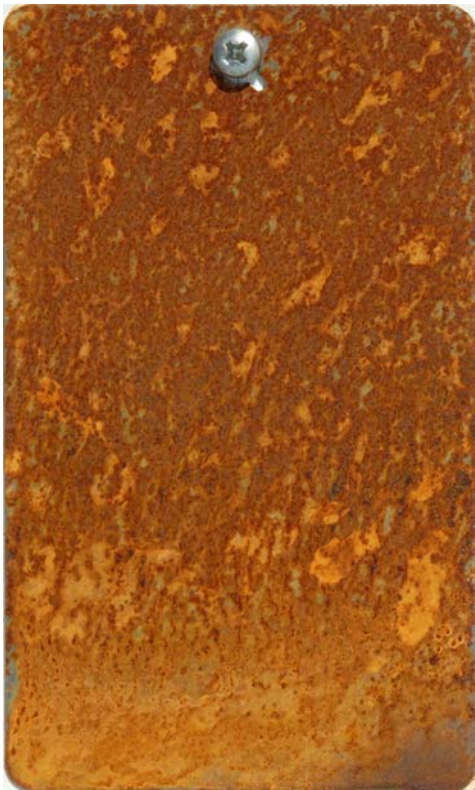
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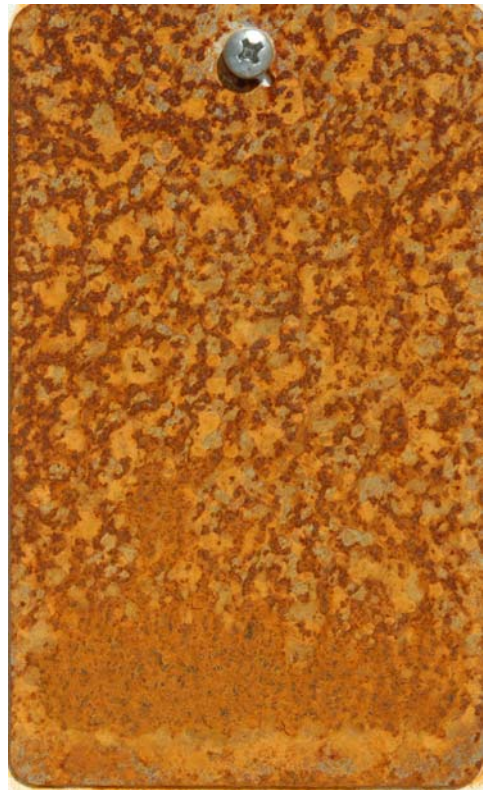
**TC-11**



**CRC 3-36**



**CRC 6-56**



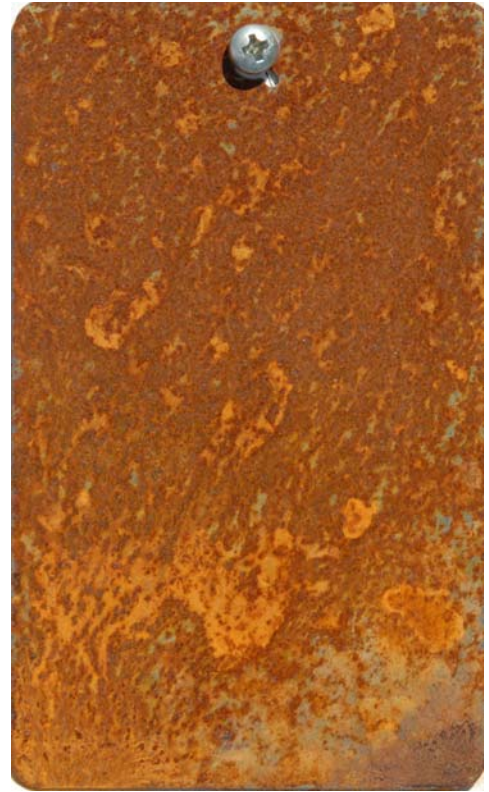
**CRC Silicone**



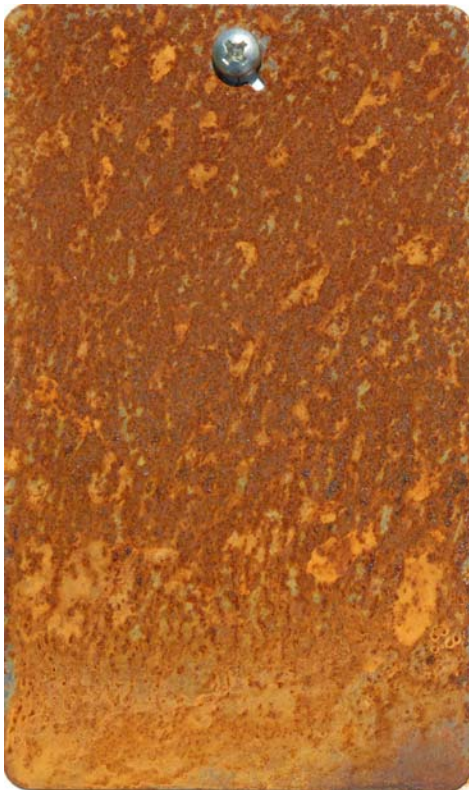
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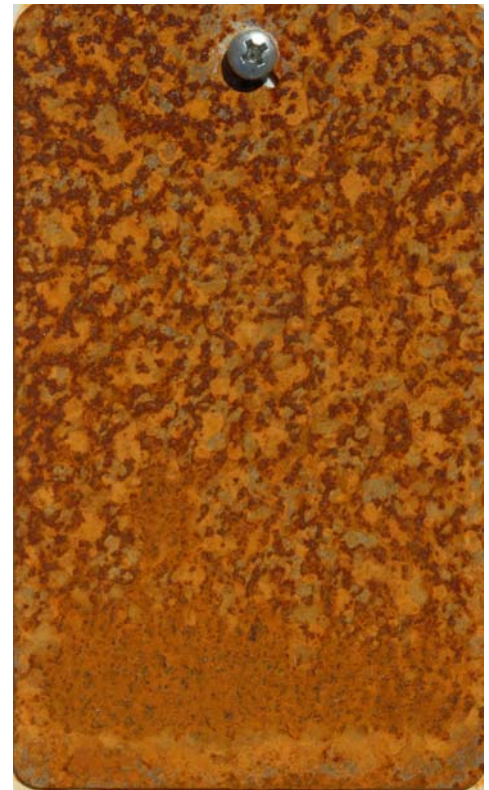
**TC-11**



**CRC 3-36**



**CRC 6-56**



**CRC Silicone**



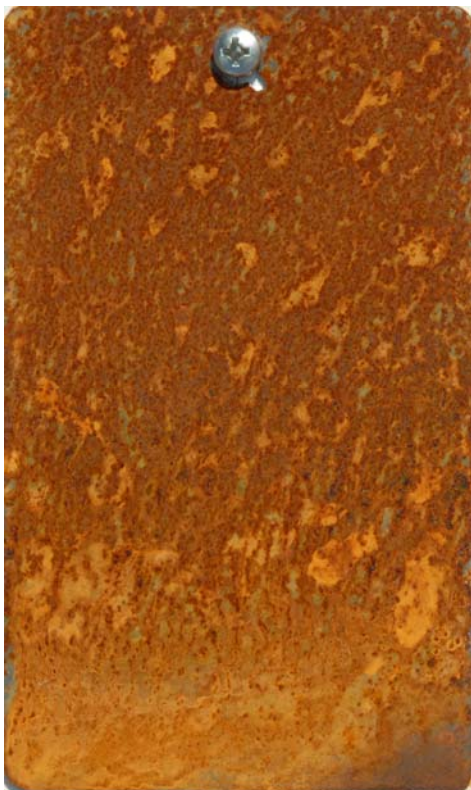
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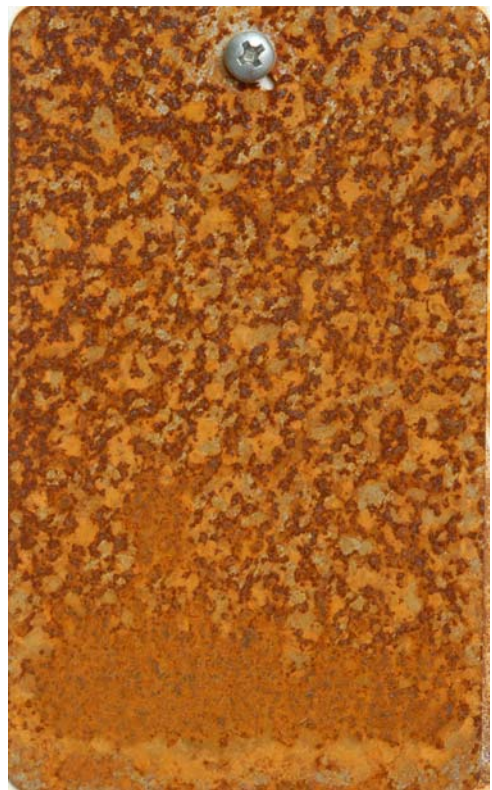
**TC-11**



**CRC 3-36**



**CRC 6-56**



**CRC Silicone**



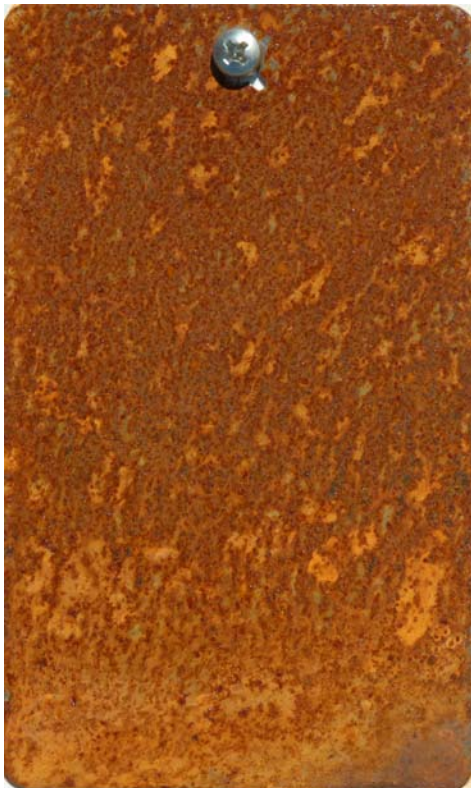
# Day Nineteen



**TC-11**



**CRC 3-36**



**CRC 6-56**



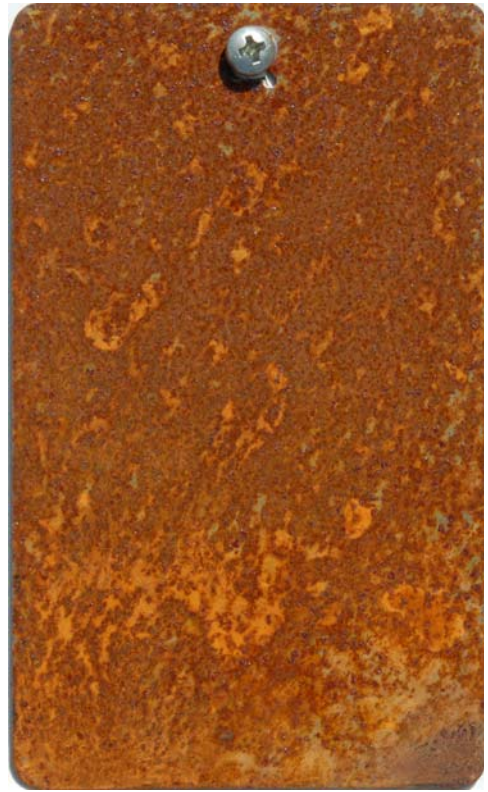
**CRC Silicone**



# Day Twenty



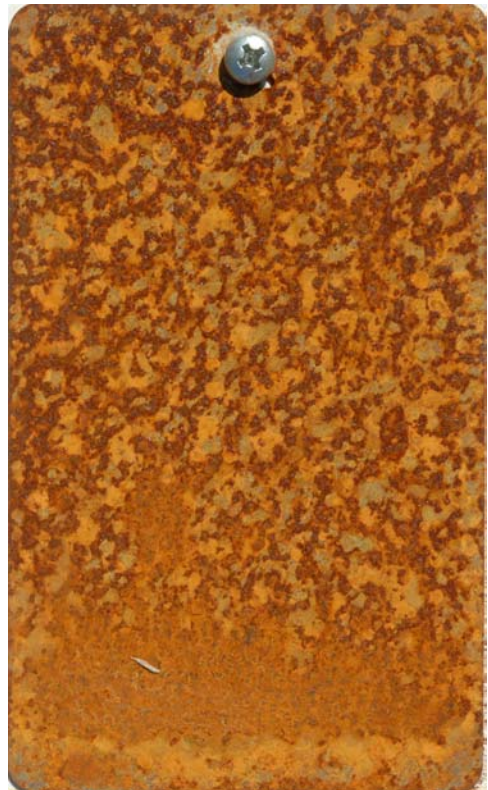
**TC-11**



**CRC 3-36**



**CRC 6-56**



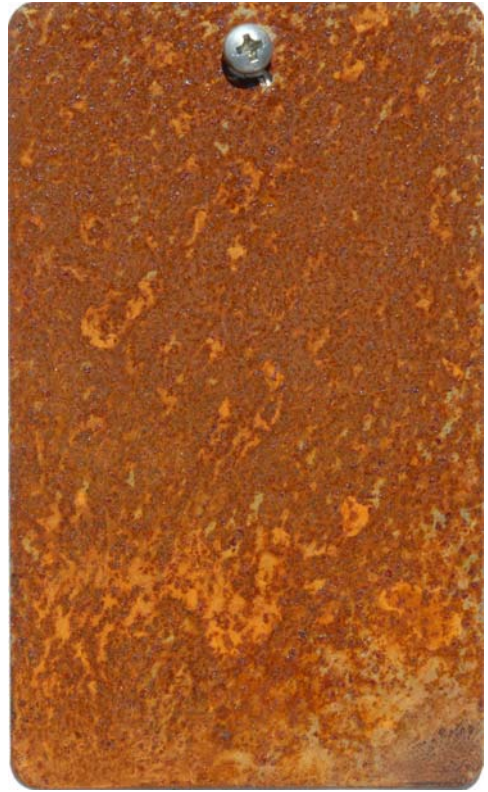
**CRC Silicone**



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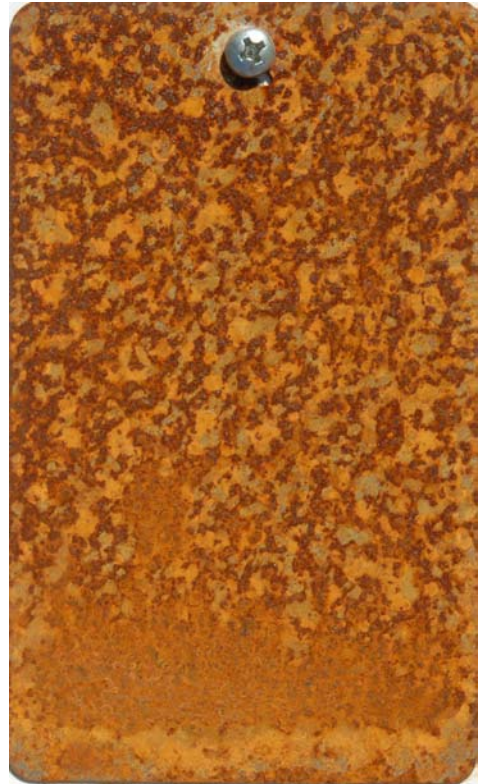
**TC-11**



**CRC 3-36**



**CRC 6-56**



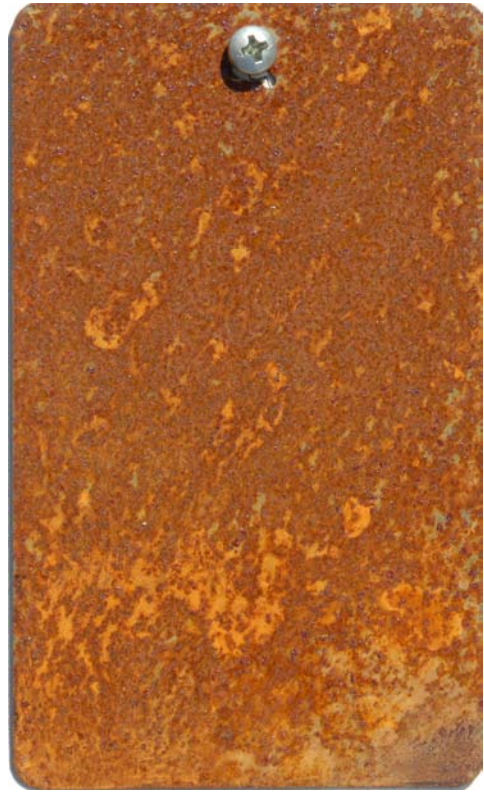
**CRC Silicone**



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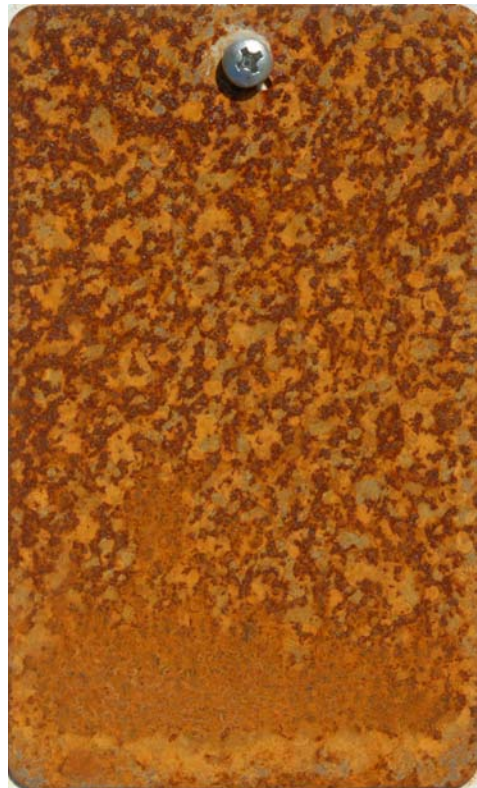
**TC-11**



**CRC 3-36**



**CRC 6-56**



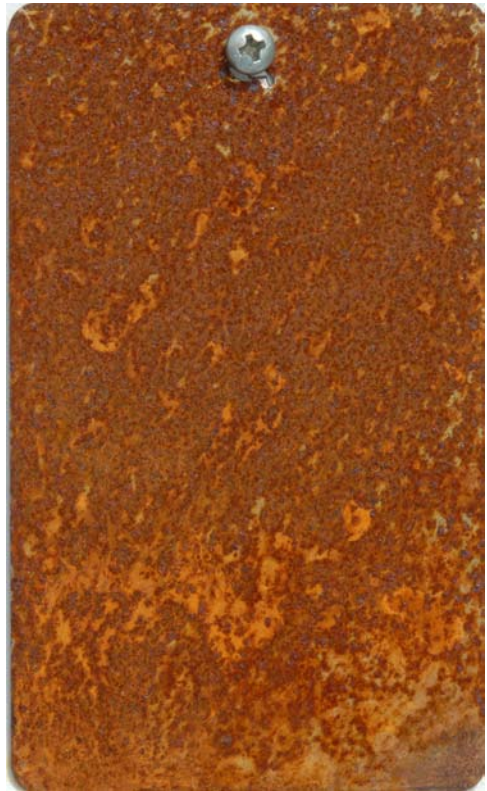
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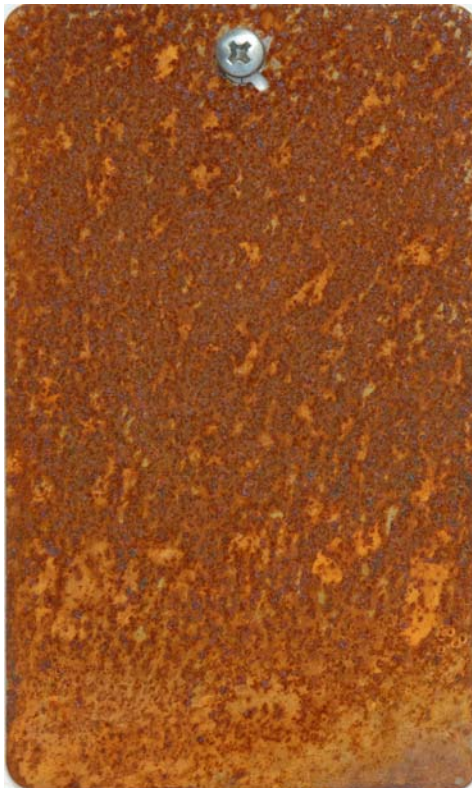
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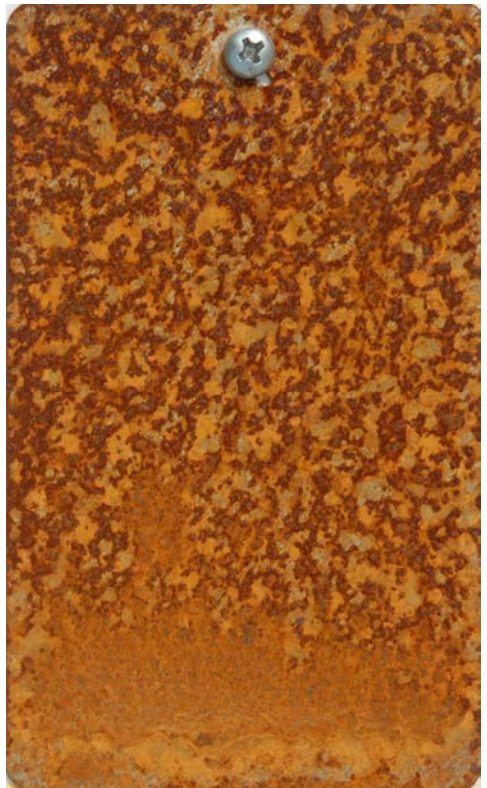
**TC-11**



**CRC 3-36**



**CRC 6-56**



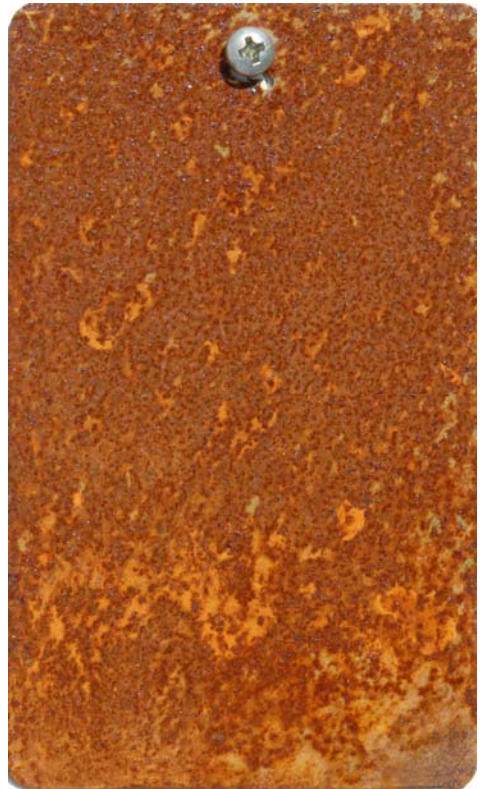
**CRC Silicone**



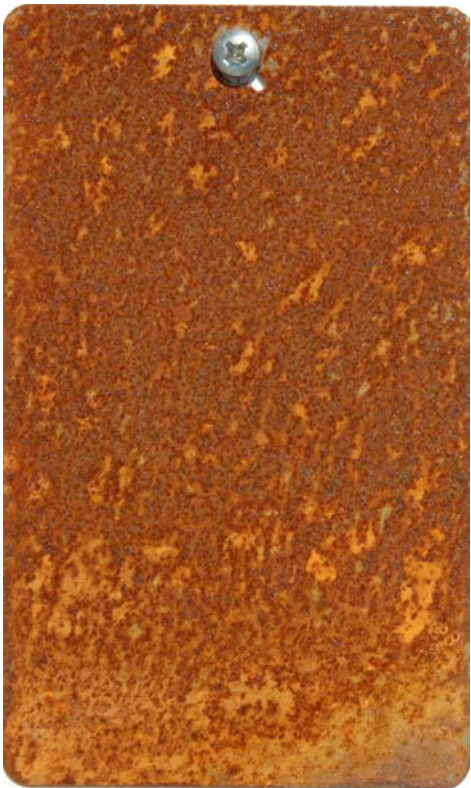
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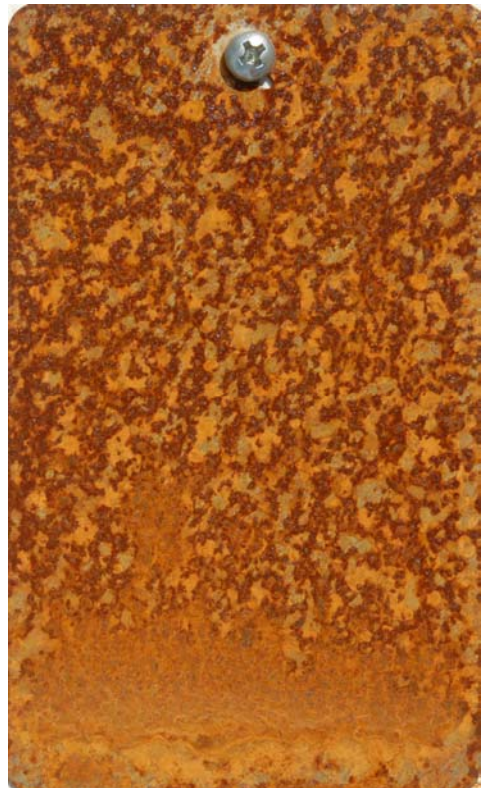
**TC-11**



**CRC 3-36**



**CRC 6-56**



**CRC Silicone**



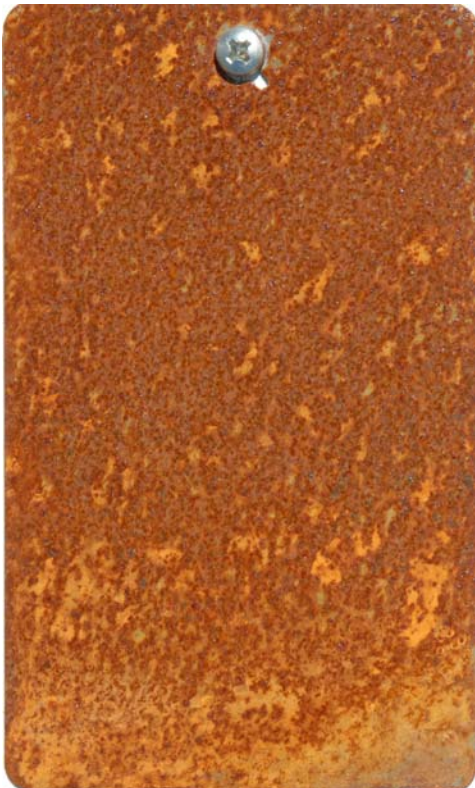
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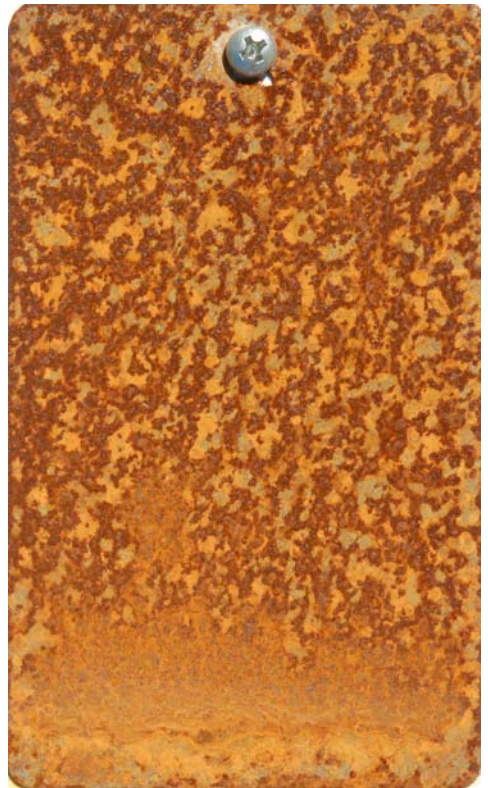
**TC-11**



**CRC 3-36**



**CRC 6-56**



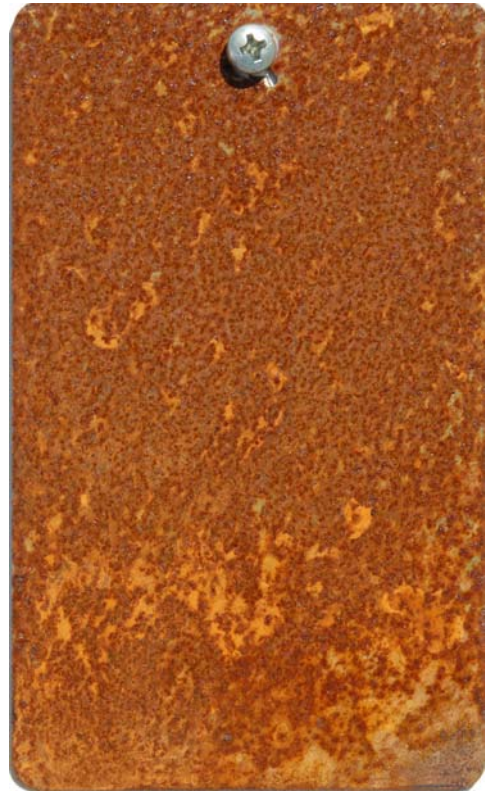
**CRC Silicone**



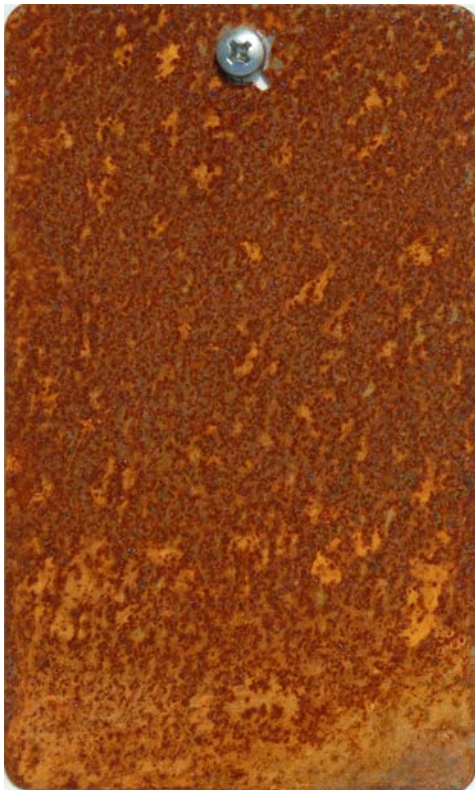
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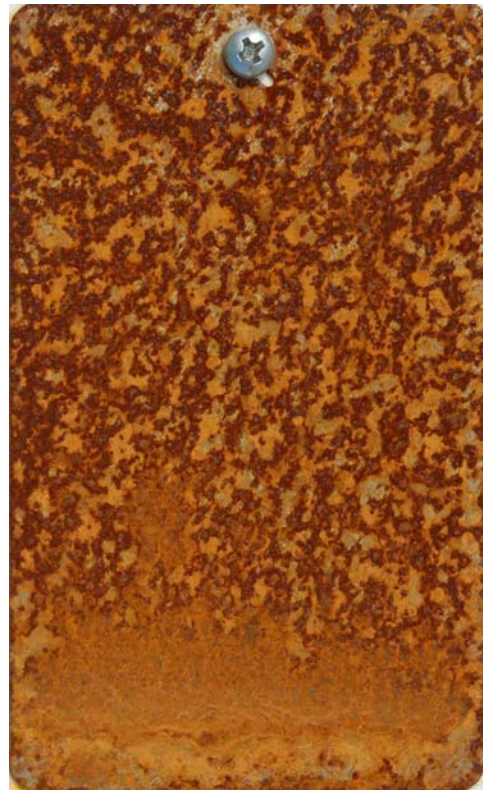
**TC-11**



**CRC 3-36**



**CRC 6-56**



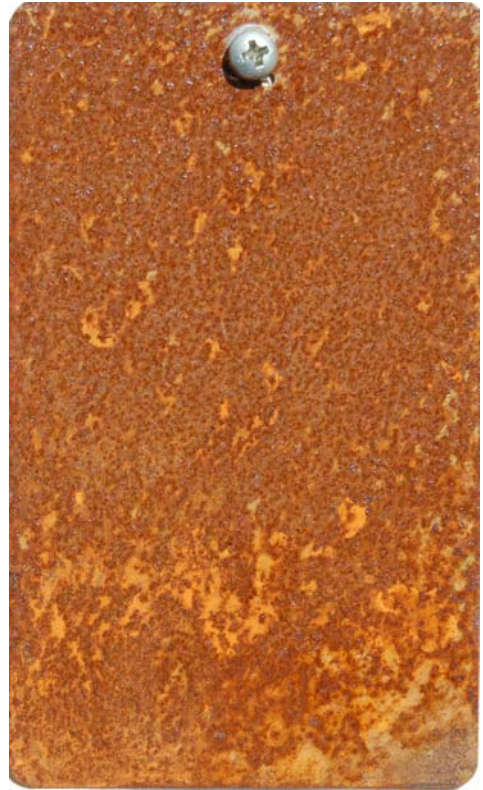
**CRC Silicone**



# Day Twenty-Seven



**TC-11**



**CRC 3-36**



**CRC 6-56**



**CRC Silicone**

# **Corrosion Test Conclusions**

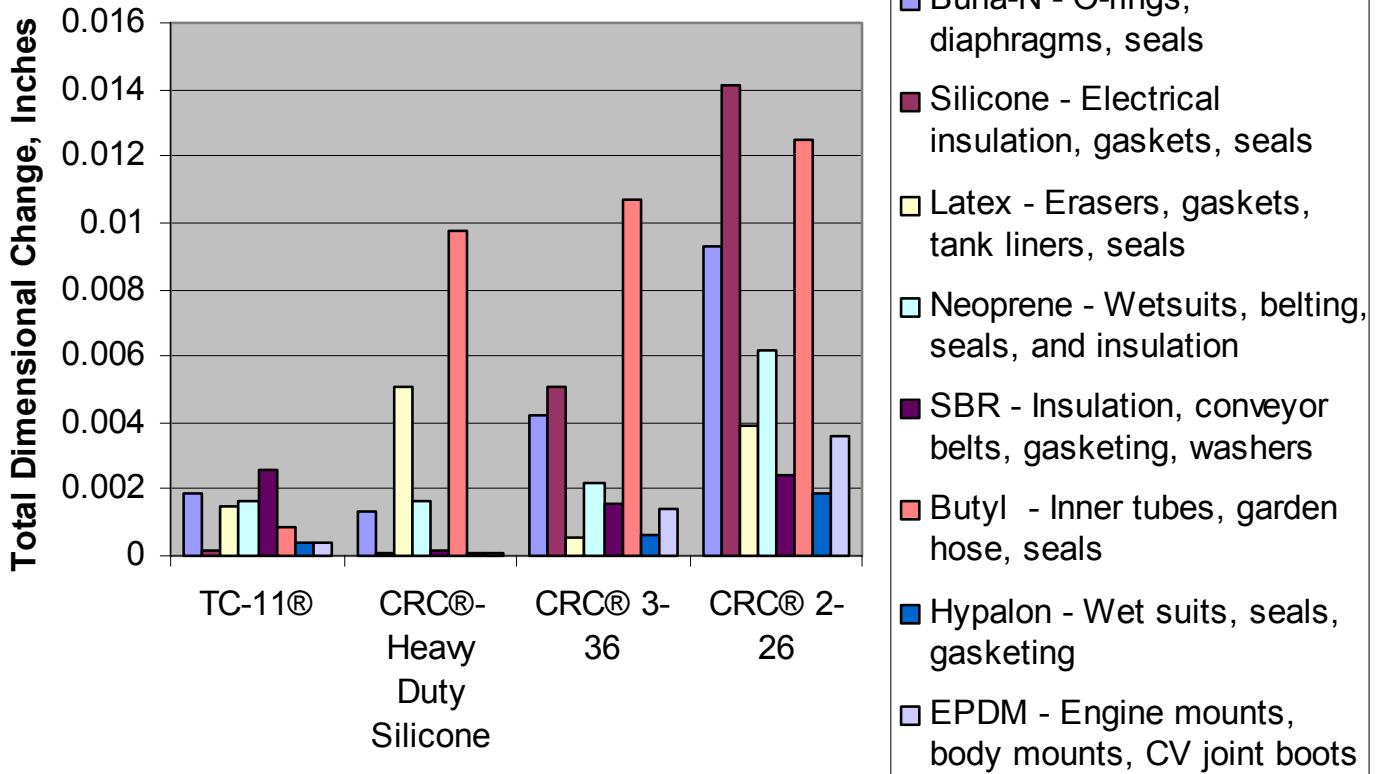
- 1. CRC Heavy Duty Silicone failed after two days of exposure.**
- 2. CRC 3-36 failed after three days of exposure.**
- 3. CRC 6-56 failed after three days of exposure.**
- 4. TC-11 failed after 24 days of exposure.**
- 5. TC-11 offers significantly better corrosion control performance than any of the CRC products tested**



# Compatibility Testing Methodology

- Test coupons were 1" diameter x 1/2" thick pieces of elastomer.
- The thickness of each coupon was measured with a digital micrometer.
- The coupon was treated once with a product.
- The thickness of the coupon was measured for a two week period with a micrometer.
- The thickness of an untreated coupon was measured for a two week period.
- The difference in the dimensional changes between the treated coupon and the untreated coupon was calculated.
- The test results were plotted on a graph in the order of performance.

# Compatibility Test Results



**Note: CRC 2-26 was not included in the corrosion test**



# **Compatibility Test Conclusion**

**TC-11 is more compatible with the sensitive elastomers tested than any of the CRC products.**