

Cortec Testing Guidelines

All testing samples must be sent to:

ATTN: Lab/Pam Rue
Cortec Corporation
4119 White Bear Parkway
St Paul MN, 55110

Please include the following information with all samples:

- Distributor/Sales Rep. coordinating testing
- End User name
- Project Number (if possible)

All chemical samples (liquids or powders) must include a GHS compliant SDS. Testing will not be conducted without a GHS compliant SDS.

If sample parts are to be returned after testing, indicate so on the test request form and supply a return shipping address. Large test parts will be returned at the end-user's expense, please specify the preferred freight company and account number.

All parts and chemical samples not marked for return will be disposed of after 21 days after completion of testing, without exception.

Any questions can be sent to Pam Rue:

Email: prue@cortecvci.com

Phone: (651) 429-1100 x 1129

Sample Submission Guidelines

PACKAGING SAMPLES

*Please label all packaging samples with the name of the manufacturer and product along with any additional information that you have available.

Film Testing

VIA (Vapor Inhibiting Ability): Determines if the film provides vapor phase protection.

- Need approximately 1 square foot of film.
- Film should be clean, new, and unused.

Razor Blade Test: Determine if the film provides contact corrosion protection.

- Need approximately 1 square foot of film.
- Film should be clean, new, and unused.

Nitrite Test: Check to see if film contains nitrite and if so, is it monolayer or coextruded.

- Requires only a few square inches of film.
- Ensure the film is new and not packaged in contact with other potential sources of nitrite.

Thickness Test: Determine how thick a film sample is.

- Requires only a few square inches of film.
- Film should be in good enough condition to not have distorted thickness.

FTIR Test: Evaluate the chemical composition of the film, often to find inhibitors added.

- Require only a few square inches of film.
- A clean and unused sample is highly recommended.

Mechanical Properties: Testing the film strength and breaking factors.

- At least 2 square feet of standard film is required.
- At least 12 square feet of stretch film is required.
- Film should not be damaged or heavily used.

Packaging Test: Parts are wrapped in the film and tested in the humidity chamber.

- Sufficient amount of film should be provided to properly wrap the parts.
- Metal test parts should be included (see “Metal Samples” below).

Sample Submission Guidelines

Paper Testing

VIA (Vapor Inhibiting Ability): Tests if the paper provides vapor phase protection.

- Need approximately 1 square foot of paper.
- Paper should be clean, new, and unused.

Razor Blade Test: Determine if the paper provides contact corrosion protection.

- Need approximately 1 square foot of paper.
- Paper should be clean, new, and unused.

Packaging Test: Parts are wrapped in the paper, enclosed in a non-VCI polyethylene bag and tested in the humidity chamber.

- Sufficient amount of paper should be provided to properly wrap the parts.
- Metal test parts should be included (see “Metal Samples” below).

Foam and Emitters

VIA (Vapor Inhibiting Ability): Tests if the emitter provides vapor phase protection.

- Need 6 emitters or 1 square foot of foam.
- Should be new or unused and in original packaging.

POWDER / SOLID SAMPLES

****A GHS compliant SDS is required for Testing****

VIA (Vapor Inhibiting Ability): Tests if the powder provides vapor phase protection.

- Need approximately 50 grams of the sample for this test.
- Should be unused powder that is not expired or exposed to adverse conditions.

Chemical Analysis: FTIR or GC/MS testing to determine composition of sample.

- Need approximately 50 grams of the sample for this test.
- Include any relevant information regarding what is in the sample and whether there are possible contaminants in the sample.
- Include solubility information for any relevant solvents if possible

Immersion Test: Metal panels are immersed in solution of water and sample for a period of time to determine the corrosion rate.

- Need a minimum of 200 grams of the sample for this test.
- Please submit metal samples (see “Metal Samples” below).

Sample Submission Guidelines

LIQUID SAMPLES

****A GHS compliant SDS is required for Testing****

Rust Preventative Testing (ASTM D-1748): Tests water based or oil based rust preventatives in a humidity chamber to determine their level of corrosion protection.

- Need at least 8 ounces of product in a well-sealed and labeled container.
- The rust preventative should not be contaminated or expired.
- Testing is traditionally done on SAE 1010 carbon steel panels. If another metal is required, please submit metal samples (see “Metal Samples” below).

Chemical Analysis: FTIR or GC/MS testing to help determine composition of sample.

- Need at least 8 ounces of product in a well-sealed and labeled container.
- Include any relevant information regarding what is in the sample and whether there are possible contaminants in the sample.

Oil Additive Testing: Compatibility and additional testing of oil additives with base oil.

- Need at least 8 ounces of oil in a well-sealed and labeled container.
- Oil should be clean and unused.
- Contact Cortec if additional testing or specific tests are required.

Immersion Test: Samples are immersed in water or solution for period of time to determine their level of corrosion protection.

- Need a minimum of 1 liter of a water or oil sample to perform testing.
- Need a minimum of 100 milliliters of water additive or oil additive to perform testing.
- Testing is traditionally done on SAE 1010 carbon steel panels. If another metal is required, please submit metal samples (see “Metal Samples” below).

Bacteria Test: Sample material is cultured to show the presence of mold or bacteria.

- Need a minimum of 500 milliliters of the water sample to perform testing.

CONCRETE / MCI TESTING

****Contact a Cortec representative regarding samples and available testing****

Sample Submission Guidelines

METAL SAMPLES

Metal Test Samples: Any metal part of panel used for packaging testing or rust preventative testing.

- Cortec stocks test panels made of the following metals:
 - o Carbon Steel
 - o Copper
 - o Aluminum
- If specific alloys, metal types, surface finishes, or combinations thereof are required, these materials must be supplied to Cortec.
- Unless required for testing, parts should be free of rust, paint, oil, or other contaminants.
- Parts must be identical to perform comparison testing. For each test, at least 3 parts per sample are required, plus a control part:
 - o Testing 3 different rust preventatives requires at least 10 parts.
 - o Testing 2 coatings in both salt spray and humidity would require 14 parts.

Please contact Cortec Laboratories if metal samples are larger than 1 foot