

5.16.28 SAMPLING BRIDGE PAINT (Kansas Test Method KT-28)

a. SCOPE

This method covers the procedures for sampling paint materials in warehouses and in the field.

b. APPARATUS

b.1. Supply of clean, one pint and one quart friction top containers (metal or plastic) for single component paint, paste and pigment.

b.2. Wide-mouth screw-top plastic containers or plastic-lined cans for the liquid components of multi-component inorganic zinc paints. Never place samples of these materials in unlined metal screw or friction top cans.

b.3. Protective gloves and eye protection.

b.4. Stirring paddles.

b.5. Mechanical agitator (for mixing paint in storage tanks)

c. SAMPLING PROCEDURES

c.1. Mixed Paints.

c.1.a. Paint sampled from storage tanks at the factory must be thoroughly mixed by mechanical agitation just prior to taking the sample. If the sample is taken from a spigot or valve at the bottom of the tank, draw off 2 gal or more and return to the tank before collecting the sample.

c.1.b. Sample paint packaged in one gallon cans by selecting one can at random from the lot and submitting the unopened can to the laboratory for test.

c.1.c. Sample paint packaged in containers larger than one gallon in accordance with the following procedure:

c.1.c.1 Put on protective gloves and eye protection.

c.1.c.2. Mix the paint thoroughly prior to taking the sample. Stirring with a paddle or a mechanical stirring device, or with a mechanical shaker will not insure complete mixing and the removal of all pigment from the sides and bottom of the container. Therefore, the following operations must be performed to properly mix the paint before a sample is taken:

c.1.c.2.a. Secure an empty, clean, dry, metal container the same size as the paint container.

c.1.c.2.b. Pour the liquid portion into the second container.

c.1.c.2.c. Work the semi-solid material remaining in the first container with a paddle until it becomes a smooth homogeneous paste. Loosen any pigment or cake that adheres to the sides of the container. Continue mixing and stirring the paste until it is smooth and free from lumps.

c.1.c.2.d. Add the liquid from the second container to the paste in small increments, mixing well after each addition.

c.1.c.2.e. After the liquid has been added and mixed into the paste, pour the paint back and forth between the two containers until it is uniformly mixed.

c.1.c.2.f. Leave the paint in the second container and examine the inside of the original container. If caked or settled pigment is present, work it into a smooth paste and mix with the paint in the second can. If the paint is so badly caked or "livered" that it cannot be properly mixed by the above procedure, reject it without sampling.

c.1.c.3. After proper mixing, take two separate one quart samples in clean, friction top cans for submission to the laboratory.

c.2. Two-Component Paints.

c.2.a. Sample paint packaged in one gallon containers by selecting one package at random from the lot and submitting the unopened package to the laboratory. This will enable the laboratory to mix the vehicle and pigment or paste in the exact ratio recommended by the manufacturer.

c.2.b. Sample two-component paints in packages larger than one gallon by taking a one quart sample of the vehicle and one pint of paste or pigment. If the vehicle component contains pigment, mix the material thoroughly in accordance with **c.1.c.** of this method before taking the sample.

c.2.c Submit the following information to the laboratory with the samples of vehicle and pigment or paste:

c.2.c.1. The manufacturer name.

c.2.c.2. The producer name.

c.2.c.3. The manufacturer's recommended mix ratio, if available. The above information will enable the laboratory to mix the vehicle and paste or pigment in the proper ratio for testing.

c.3. Dry pigment: Sample dry pigment by opening the package and taking at random, sufficient material to fill a one pint can. Do not mix the pigment before taking the sample.

c.4. Liquid Paint Materials: (Varnish, thinners, clear vehicles, drying oils, solvents and similar materials.)

Prior to taking samples of liquid paint materials, check for the presence of water and suspended matter or sediment and take necessary steps to insure that the sample will contain a representative portion of the materials.

Before taking samples of liquids containing a high proportion of volatile materials, rinse out the sample container several times with a portion of the liquid to be sampled.

Screw-top containers having tight fitting lids with seals that are not soluble in the liquid being sampled should be used for shipping the samples to the laboratory.

c.5. Field Sampling: Samples of paint and paint materials are to be taken, in accordance with the instructions set forth above, from the manufacturer's sealed containers immediately after they are opened on the project. Samples of two component paints should include a sample of the pigment or paste and a sample of the vehicle. Samples should never be taken after the paint has been thinned, from a paint pot of the spraying system or from a spray nozzle as such samples are not representative of the paint as it was originally tested and accepted.