

MULTISPEC® WATERBORNE

Architectural/Industrial Multicolor Spray Finish Specifications

1. PRODUCT NAME: MULTISPEC WATERBORNE Architectural/Industrial Multicolor Spray Finish (MS90).

2. MANUFACTURER: Manufactured by Multicolor Specialties Inc. (MSI) 2101 South 54th Avenue, Cicero Illinois 60804-2209.

3. PRODUCT DESCRIPTION:

Material: Durable, decorative architectural multicolor spray applied finish. Excellent overall properties including durability, chemical resistance, adhesion and dry time.

Limitations: Selected exterior applications and interior floors require special preparation and companion products. Freezable and heat sensitive. Must be protected from temperature extremes during shipping, storage and application. Requires knowledgeable applicator and specific spray equipment.

Sizes: Gallons and 5 gallon pails only. Shipping weight 9.8 lbs per gallon.

Patterns and Colors: Random dispersion of various size flecks of different colors. Multicolors are manufactured to specification and delivered ready to use.

Composition and Materials: Waterborne paint droplets suspended in an immiscible water phase.

Suitable Applications: Interior decorating and product finishing. Walls, ceilings, trim, furniture, fixtures, and decorative accessories. Properly prepared and primed drywall, gypsum board, fiberboard, acoustical tile, paneling, plaster, concrete, block, brick, ceramic, glass, fiberglass, metal, plastic, laminates, and vinyl wallcovering.

Unsuitable Applications: Not for use on areas with hydrostatic pressure, flexible surfaces subjected to excessive structural movement, or exposure to corrosives or high heat.

4. TECHNICAL DATA:

Finish: Flat finish with slight physical texture. The larger the fleck size the heavier the physical texture.

Gloss: 10° with 60° glossmeter (ASTM D-523).

Coverage: Approximately 120 square feet per gallon for full coat coverage over smooth properly primed surface.

Coverage varies depending on surface texture and film thickness. The larger the fleck size the less coverage.

Shelf Life: May degrade under temperature extremes or due to excessive agitation. Use within 12 months from date of manufacture.

Dry Time: Air dry (70° and 50% humidity): To touch, 30-45 minutes. To use, 24 hours. Full cure, 4 to 5 days. Force dry (140-200° F.): To touch, 10-15 minutes. Full cure, 20-30 minutes. Dry time will vary depending on temperature, humidity, film thickness and type of surface.

Fire Rating: Class A rating. Flame spread 5. Smoke density 0. Tested by independent laboratory in accordance with test method ASTM E-84-89a.

Flash Point: Not applicable (non-flammable).

Flexibility: No cracking or checking when bent around 1/8" mandrell (ASTM D-1737).

Impact Resistance: 80 inch pounds direct (ASTM D-2794).

Film Hardness: H-2H pencil hardness after full cure (ASTM D-3363).

Solvent Resistance: Withstands 25 MEK rubs after film is fully cured.

Abrasion Resistance: Taber abrasion 85.2 mgms. loss/1000 cycles. CS-17 wheels 500 grm. load (ASTM D-4060).

Self Lifting: Excellent intercoat adhesion (FED STD-141B, Method 6252).

Washability: Reflectance recovery, 95.4% (ASTM D-3450).

Scrub Resistance: Over 30,000 cycles (FED STD 141 A, Method 6142). 545 cycles (ASTM D-2486).

Detergent Resistance: 168 hours @ 77° F. (ASTM D-2248).

Stain and Household Chemical Resistance: No stains from mild acids, chemicals, oil or food (ASTM D-1308).

Mildew, Fungus Resistance and Bacterial Inhibition: Coating provided complete fungal resistance in accordance with FED STD 141B, Method 6271, using *Aspergillus oryzae*. Bacterial inhibition: no support of bacterial growth, in accordance with ASTM G-22, *Pseudomonas aeruginosa*.

Humidity Resistance: Evaluated after 100 hours (ASTMD-4548); blistering, none (ASTM D-714); rusting, slight (ASTM D-610).

Accelerated Weathering: G-23, Type E. Evaluated after 300, 500 and 1000 hours exposure for:

	300 hrs	500 hrs	1000 hrs	Method
chalking	none	very slight	slight	ATMD-4214
checking	none	none	none	ASTMD-660
cracking	none	none	none	ASTM D-66
color change				▲E=2.1

V.O.C./V.O.S. Content: Maximum 225 grams/liter, 1.88 lbs per gal. Nonphotochemically reactive.

Odor: Mild odor while spraying and drying.

5. APPLICATION INSTRUCTIONS:

Handling/Storage/Shipping: Care must be exercised in handling. Paint is fragile. To mix thoroughly, stir gently with paddle. **Do not mix mechanically.** Vigorous agitation may break down color flecks and change color. **Do not freeze or store over 100° F.** Close container tightly after each use. Do not store in unlined metal containers.

Surface Preparation and Priming: Surface must be clean, dry, flat and without defects. Prime with appropriate primer/sealer/stainkiller required for surface to be painted. Follow primer manufacturer's instructions for use. Use premium quality primer having good holdout and tooth. For hard, smooth surfaces, specific high performance primers are recommended. Undercoats that contain shellac, wax, silicones or stearates may not be suitable. When in doubt, check intercoat adhesion between primer and multicolor topcoat prior to proceeding with application. Do not prime with flat wall paint. Alkaline materials such as cement, mortar, plaster and alkaline joint compounds will damage Multispec WaterBorne. Such surfaces must be properly prepared and sealed to protect the multicolor topcoat. Textured surfaces must be filled and primed. Pattern size will appear smaller over textured surfaces.

Reduction: When necessary, add water gradually in small increments (3 to 4 liquid ounces per addition not to exceed 10% in total) until an acceptable spray pattern is achieved.

Too much water will cause paint to sag. **Do not add thinners, reducers or solvents.**

Equipment: Multispec WaterBorne was designed to be applied with HVLP and conventional air spray equipment.

NOTE: Do not use airless spray equipment. Color standard sprayouts are sprayed with Binks Mach I HVLP gun with 97AS tip and an ASME dual-regulated pressure pot. With conventional air spray equipment such as Binks 2001 gun with internal mix nozzle assembly, #200 air nozzle, #66SS fluid nozzle and 565 needle, use an ASME rated dual-regulated pressure pot and compressor delivering consistent CFM to match spraygun's capacity. May also be applied with an external mix nozzle assembly for industrial applications.

Application Guidelines: Final finish may vary from standard due to variations in paint, equipment, pressure settings, technique, and substrate. *Always evaluate color, pattern, and paint delivery rate on mock-up test area while using specific batch of paint with equipment selected for project, and be certain that mock-up meets with the approval of specifier prior to beginning project. Once approved, the mock-up should serve as the standard for the project. Color standards and film properties can only be attained when application is 100% full coat coverage. Follow equipment manufacturer's instructions for use and maintenance of equipment. Observe all warning statements relating to both paint and equipment.*

- Avoid application during periods of high humidity and or when temperature of paint, surface or air are below 60°F or above 100°F.
- Apply tack coat to facilitate application, optimize full coat coverage and minimize sagging.
- Remove all filters and strainers from spray equipment.
- Do not use pressure pot agitator, siphon-type or gravity feed guns or airless spray equipment.
- Due to fast-drying characteristics, paint may build up in the tip and reduce orifice size during spraying. Inspect and clean tip periodically.

One-Step Application Technique: Set material and air pressure to match approved sprayout. Maintain uniform distance of 18-24" between the gun and surface. Aim spray gun directly at surface (spraying at an angle will distort pattern). Spray with horizontal strokes, overlapping each previous stroke by 50% and crosshatch the same area with vertical strokes to eliminate any lap marks and to achieve full coat coverage. Spray an area comfortable to reach.

Topcoating: Not necessary in most applications. Can be topcoated to increase gloss and/or improve properties.

Touchup: Patch and/or prime when necessary. Select spray equipment and tip size and adjust pressure settings to be used. Do a mock-up to match original finish.

1. For small areas: Apply multicolor lightly as a spattercoat, inspect and continue to spatter area until same appearance is achieved as the adjacent painted area. Feather out as necessary to blend in.
2. For large areas: Corner to corner touchup is recommended using the same application technique and equipment setup as used in original application.
3. **NOTE:** In areas topcoated with clear, degloss and/or prime before repainting, using multicolor followed by clear topcoat.

Cleanup: Flush equipment thoroughly with warm water until clean.

PRECAUTIONS: DO NOT BREATHE VAPORS OR SPRAY MIST. USE WITH ADEQUATE VENTILATION. To avoid breathing vapors or spray mist, open windows and doors or use other means to ensure fresh air entry during application and drying. Wear respiratory protection (NIOSH/MSHA approved respirator). Close container after each use. Avoid contact with eyes or skin.

INHALATION: May cause nose and throat irritation. If affected by inhalation of vapor or spray mist, move to ventilated area.

EYE CONTACT: May cause eye irritation. In case of eye contact, flush immediately with plenty of water and get medical attention.

SKIN CONTACT: May cause skin irritation. In case of skin contact, wash with soap and water.

INGESTION (Swallowing): May cause irritation of digestive tract. If swallowed induce vomiting and get medical attention. Keep out of reach of Children. Keep from freezing. For additional information, read Material Safety Data Sheet.

HMIS Rating: Health, 2; Flammability, 0; Reactivity, 0; Personal Protection, I.

Personal Protection Equipment: Safety glasses, gloves, and vapor/dust respirator (NIOSH/MSHA approved).

6. AVAILABILITY AND COST:

Availability: Available in the United States and several foreign countries.

Cost: Prices vary depending on order quantity and color complexity.

7. LIMITED WARRANTY:

Under limited warranty, Multicolor Specialties, Inc. (MSI) guarantees MULTISPEC WATERBORNE against defects in materials and workmanship. Due to the many variables in a multicolor formulation it is sometimes difficult to achieve good batch to batch uniformity. MSI reserves the right to approve batches on the basis of an acceptable commercial match. It is important for customers to purchase adequate quantities of multicolor paint from a given batch for a given job, as there may be slight differences in subsequent batches. Since the use of this product is beyond the control of MSI, liability of MSI shall be limited to replacement of defective product. MSI shall in no event be liable for consequential damages.

8. MAINTENANCE: Wash as required with a solution of mild detergent or use a mild abrasive (i.e. Soft Scrub) and rinse with water. Should unusual soil or stain problems occur, contact the manufacturer for instructions.

9. TECHNICAL SERVICES: For specific assistance, contact MSI or local distributor. MSI will provide technical information for specific applications upon request.

This product is covered by one or more of the following patents: U.S. Patent Nos. 5, 114, 484; 5, 114, 485; 5, 199, 980; 5, 314, 535 and other U.S. and foreign patents pending.

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