

In this CU test, a measured amount of each paint sample was brushed onto a panel in a standard way. The panels were used to judge ease of brushing, appearance of the paint film, and hiding power

FURNITURE PAINTS



Most brands were good overall, but they differed in suitability for specific jobs

The relatively high cost of good furniture has persuaded many a home craftsman to build his own, and compelled many a young married couple to settle for at least some pieces which they must finish or paint themselves. Further, redecorating a room frequently will dictate that the color of some furniture pieces be changed. Various stains and furniture finishes are, of course, available, but the increasing use of color in the home has decided many users on a good furniture paint.

What are the characteristics of a good furniture paint? Since appearance is a primary objective, the paint should dry to a smooth, good-looking film—uniform in color and gloss, and free of brush marks and other blemishes. Since the other major purpose of painting is protection against wear and tear, a good furniture paint will be resistant to damage by spilled liquids, by scratching, by “dry” abrasion (from dishes, ash trays, and other objects likely to be moved across it), by impact, and by scrubbing. In addition, for convenience, it will be easy to brush on, will dry relatively quickly, will have good hiding power, will be comparatively easy to clean without losing gloss or color, and will retain its good qualities for a long time.

Excellence in certain of these characteristics is, of course, more important for some uses than for others. For example, for use on metal (which may expand and contract and be subject to flexing) and for outdoor use, good flexibility and adhesion are especially desirable attributes.

For these reasons—although most of the paints tested were judged Good in overall quality and differed little on an overall basis—readers should note carefully the differences in specific characteristics (pointed out in the Ratings, and

in the Table on page 377), which make each brand more or less suitable than others for particular purposes.

High-gloss enamels are the most popular paints for furniture, but semi-glosses also are used, especially on architectural pieces, such as built-in bookcases and cabinets.

For its furniture-paint tests, CU chose 11 nationally advertised and distributed “quick-drying” high-gloss enamels, the three semi-gloss brands rated highest in last year’s wall-paint report (CONSUMER REPORTS, July 1958), and a new “multi-purpose enamel” (*Jet-Dri*) which is being promoted as the “fastest-drying enamel made.” The regular high-gloss enamels are covered in the body of this report; the semi-glosses are treated separately on page 375, and *Jet-Dri* is discussed on page 378.

For each of the high-gloss brands in the project, CU’s shoppers bought the three colors which, according to a survey of manufacturers, are the best sellers in this type of paint: white, black, and dark green. Numbered, but otherwise unidentified, samples of each brand and color were sent to CU’s paint consultants, who tested and evaluated each sample for a host of factors affecting application, appearance, resistance to wear-and-tear, and keeping quality. The intensity range of the colors tested was wide enough, in the opinion of CU’s consultants, to make most of the test results applicable to a majority of the 16 to 27 ready-mixed colors available in the brands.

In terms of application characteristics, the two main factors evaluated were brushing ease and drying time.

BRUSHING EASE. Because of the smaller areas involved, ease of brushing is less important in furniture painting than it is

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in painting walls. However, all the high-glosses tested were judged at least good in this respect.

DRYING TIME. Although high-gloss furniture enamels commonly are referred to as "quick-drying," none of those tested dried really quickly. Most took five to eight hours to dry through. (For example, despite the phrase "Four Hour" in the brand name of the Sears enamel, two Sears colors were in the five- to eight-hour group, and the third took over eight hours to dry through.)

Drying time depends to some extent on temperature and air movement. For quickest drying, do your painting in a fairly warm, well-ventilated area. Wait about eight hours before handling the painted article and at least 24 hours (to permit hardening of the paint) before putting it into full service or giving it a second coat. (The brands which were judged relatively slow drying will require even more time.)

Appearance

CU considered a variety of factors bearing on the appearance of the dried paint film.

LEVELING is the tendency of a paint to flow slightly after application. A paint with good leveling qualities will erase brush marks, flow into carved areas, and cover such irregular surfaces as knobs and legs smoothly. Good leveling is particularly important in a furniture paint because of the desirability of a truly smooth finish. Most of the high-glosses tested were judged very good or better in this factor.

SAGGING is the tendency of a paint to flow excessively and to form runs or curtains on vertical or sloping surfaces. In general, the high-gloss manufacturers appear to have struck a good balance between leveling and resistance to sagging in their enamels; most brands proved to be very good or better in this characteristic, too.

COLOR AND GLOSS UNIFORMITY is the most important single factor evaluated, in CU's opinion, because performance in this respect, more than in any other, determines the finished appearance of the painted article. In judging uniformity, CU's consultants paid particular attention to *lapped areas* (where paint had been applied, after a five-minute interruption of the work, with brush strokes slightly overlapping an already painted area), *cross-brushed areas* (where, with no more than a five-minute interruption of the work, paint had been applied to an already painted area with brush strokes at right angles to those first used), and *touched-up spots* (where paint had been applied to an already painted area a day after the original painting).

All of the high-glosses tested were judged at least very good in uniformity; most were excellent. However, the best result is possible only if the surface to be painted is properly sealed, clean, and free of irregularities. Fresh wood should be sanded smooth, if necessary, and given a coat of enamel undercoat before painting; previously painted or varnished surfaces should be smooth. High-gloss surfaces should be sanded to roughen them slightly, so that the paint is easier to apply and adheres better. For indoor use where

exposure to water is unlikely, metal surfaces need no primer; for other situations, apply a metal primer to prevent corrosion.

GLOSS was satisfactorily high in all 11 brands.

WHITENESS OF WHITE. While all brands were considered satisfactory in this respect, the white of one brand (*Patterson-Sargent*) was judged outstanding in purity and clarity.

HIDING POWER, as reported for each brand in the Table, is an indication of the relative ability of that brand's white, off-whites, ivories and light yellows to hide what lies beneath it. A paint with inferior hiding power may require two coats for surfaces which a paint with good hiding power could cover adequately with one coat. However, whether one coat will be enough in any given situation will depend largely on the color of the paint and the color contrasts of the surface to be painted.

The individual judgments of hiding power are based only on the white of each brand, because all the blacks and dark greens tested were excellent in hiding power. Although off-whites, ivories, and light yellows may have slightly better hiding power than the whites, in these shades too the brands probably would rank in about the same relative order in terms of this factor. Deeper colors (except for red and deeper yellows) are likely to be about equal to the dark greens in hiding power; pastels will fall between the pale and deeper shades.

Resistance to wear-and-tear

CU's wear-and-tear tests fell into eight major categories.

EASE OF STAIN REMOVAL. Fresh (day-old) pencil, crayon, and grease marks were easy to remove from the dried film of all colors of all brands when a solution of a heavy-duty detergent was used. Removing marks that were two weeks old—the test on which is based the ease-of-stain removal ratings in the Table on page 377—was a different story. Eliminating such marks was found to be relatively easy with only two brands—indicating the advisability of removing stains as promptly as possible.

SCRUBBABILITY. Scrubbing of any of these enamels with an abrasive—even a mild scouring powder—should be avoided unless you encounter a stain too stubborn to respond to gentler treatment. Such scrubbing actually wears away part of the paint film, dulls the gloss, and usually will change the color of the paint.

The painted test panels were not significantly damaged even when old and stubborn stains were taken off with the plain detergent solution. However, when scrubbed (400 strokes) with the same solution plus a mild abrasive, all the panels showed a marked loss of gloss and a change in color. In addition, a considerable amount of the paint film was worn away in many cases (the outstanding exceptions being the three brands listed in the Table that were rated very good in resistance to scrubbing wear).

DRY-ABRASION RESISTANCE. Superiority in this factor is especially desirable in paint to be used for "knock-about" or metal articles, or for other surfaces likely to be particularly subject to such abrasion (such as chair seats or end-

SEMI-GLOSSES AS FURNITURE PAINTS

While high-gloss enamels are the most popular paints for furniture, many persons prefer a semi-gloss finish, particularly on such "architectural" items as built-in cabinets and bookcases.

The best way to achieve such a finish on furniture, in the opinion of CU's paint consultants, is to apply a number of coats of a good high-gloss enamel, rubbing each coat down with a fine abrasive after it has hardened. However, since many consumers would find this process too tedious, CU subjected three brands of semi-gloss enamels which were top-rated in its 1958 wall-paint report (CONSUMER REPORTS, July 1958) to the furniture-paint tests that are the subject of the present report.

Only the whites of these semi-glosses were tested this time since, as a result of its earlier semi-gloss tests, CU already had considerable information about the performance of other colors of the three brands. In the consultant's opinion, the findings reported here for the whites should be applicable to most shades of these brands (with the possible exception of the dark "decorator" shades).

All three brands tested—*Du Pont Duco Semi-Gloss*, *Moore's New Satin Impervo*, and *Sherwin-Williams Kem-Glo*—were rated Good overall as furni-

ture paints, but like the high-glosses, each had specific strong and weak points that would make it more or less suitable for a particular job.

In comparison with most of the high-gloss enamels, they were found not so suitable for use on toys and "knock-about" or metal furniture (see main report) and for outdoor use. They also suffered greater loss of gloss in the Weatherometer exposure. They were better than most high-gloss brands in brushing ease and resistance to sagging, but not quite so good in leveling.

In ease of old-stain removal, *Kem-Glo* was rated good; *Duco* and *Satin Impervo*, fairly good. In resistance to wear by scrubbing with a mild abrasive, *Duco* and *Satin Impervo* ranked with the best of the high-glosses. Since they started with less gloss than the high-gloss enamels (both brands dried to a relatively low semi-gloss finish), their gloss change from abrasive scrubbing was less. *Kem-Glo*, rated only fairly good in resistance to scrubbing wear, had a gloss intermediate between that of the other two semi-glosses and the high-glosses.

In color and gloss uniformity, *Duco* and *Kem-Glo* were judged excellent, *Satin Impervo* very good—but for best results, a properly prepared surface is

even more important with semi-gloss paints than with high-glosses.

Besides being top-rated as wall paints, these brands were among the fastest-drying of the 12 semi-glosses included in CU's earlier tests. Their dry-through time was as good as that of any of the high-glosses.

DU PONT *Duco Semi-Gloss* (E. I. du Pont de Nemours & Co., Wilmington, Del.) lists in the New York City area at \$2.97 per quart. Twenty ready-mixed colors are available. Some colors carried label warnings as to lead content; CU's tests and examination of label formulation data indicated that other colors were likely to be "safe" (see main report).

MOORE'S *New Satin Impervo* (Benjamin Moore & Co., NYC) lists in the New York City area at \$1.95 per quart. Nineteen ready-mixed colors are available. All colors were labeled "safe" as to lead content; CU's tests and examination of label formulation data indicated that the label claims are likely to be reliable.

SHERWIN-WILLIAMS *Kem-Glo* (The Sherwin-Williams Co., Cleveland) lists in the New York City area at \$2.85 per quart. Twenty-six ready-mixed colors are available. None of the colors carried a label warning as to lead content; CU's tests indicated that all colors were likely to be "safe."

table tops). Within brands, the blacks resisted dry abrasion much better than the other two colors tested.

IMPACT RESISTANCE AND FLEXIBILITY, two other important "knock-about" characteristics, varied widely among the enamels tested. The latter is particularly important in a paint for use on metal surfaces, which expand and contract in response to variations in temperature, and for outdoor use. A combined rating for each brand in both factors is given in the resistance-to-chipping column shown in the Table.

SCRATCH RESISTANCE, or hardness. Since all the brands but *lapalac* (judged fairly good) were rated as good in this factor, it is not included in the Table on page 377.

WEATHEROMETER EXPOSURE. A laboratory accelerated outdoor-exposure apparatus, known as a Weatherometer, was used to screen the paints for outdoor service. Since the device does not exactly duplicate outdoor conditions, the fact that CU's tests did not reveal deficiencies in this type of exposure should be interpreted mainly to mean that there is no contra-indication against outdoor use rather than as a guarantee of performance.

The white paints of all of the brands tested were exposed in the Weatherometer for more than 300 hours—theoretically equivalent to almost one year of outdoor exposure.

None of the paints showed any signs of failure with regard to chipping, peeling, checking, or change in color. They all showed very slight chalking, and the high-gloss paints all showed an equal and marked loss in gloss (but less than the change for the semi-gloss paints). On the basis of these observations, CU's consultants judged all the high-gloss brands to be good in this respect, and therefore suitable for outdoor use; the three brands which also had superior knock-about properties would be superior for outdoor use.

SPOTTING RESISTANCE. All of the brands tested were judged good in resistance to spotting by hot and cold water, detergent, weak acid, and a 50 per cent alcohol solution (as in bonded whiskey). Most samples suffered a temporary softening and change in appearance in these tests, but they recovered in hardness and appearance.

Permanent damage can be avoided by carefully blotting up spilled liquids. While some dark greens were permanently changed by prolonged exposure to alkaline (detergent) and acid (vinegar) solutions, this kind of damage could be prevented by promptly blotting up such liquids.

RESISTANCE TO AGING. Over a span of two and a half months, the blacks and greens changed only negligibly in gloss and color. Although changes (chiefly an apparent yellowing) occurred in some whites during the test period,

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none of the changes was considered serious—especially since the entire surface of the test panels, half of which had been covered during the test, changed uniformly.

Keeping qualities

For best results, paint to be stored should completely fill the can (leaving no room for air, which promotes deterioration) and be tightly covered. In CU's storability tests, the cans—tightly covered, but only three-quarters full, to accelerate the test and because many consumers store paint under less than optimum conditions—were stored for three months and then examined for separation of liquid and solids, skinning, settling, lumps, ease of redispersion, and change in viscosity. While most of the brands tested were judged very good or excellent in storability—the ex-

ceptions were *Wards* (good), and *Glidden Japalac*, and *Sherwin-Williams Enameloid* (both fairly good)—CU's advice to consumers is that the best practice is to buy only enough paint for the job at hand. Although CU's tests indicated that these paints will store as well as other oil-based paints, the storability performance of the test samples may have been due in considerable part to the fact that CU took great pains to make sure that fresh samples were used in the project. Unfortunately, this type of paint may not move so rapidly in the stores as other types. When such pains were not taken in buying samples for CU's tests of lead content, redispersion of the pigment in many samples was hard work, probably because the samples were over-aged.

Many paint and hardware stores have a re-mixing machine for paints which does the job much better than it can be done at home. The consumer should insist on this service if it is available. Paint which will not re-mix to a uniform consistency should be returned to the store.

RATINGS OF HIGH-GLOSS ENAMELS AS FURNITURE PAINTS

Listed in order of estimated overall quality by groups; within groups, alphabetically. For all brands, Ratings are based on tests and evaluations of samples of white, black, and green in a large number of individual characteristics; for separate evaluations of the major criteria entering into CU's Ratings, see Table on facing page. Differences in overall quality among brands rated Good were small, but there were differences in specific characteristics which made some brands more suitable or less so than others for a particular use. For a discussion of the lead content in paints and of CU's tests on this score, see story. Prices vary regionally and from store to store; those given are list for the one-quart size in the New York City area.

ACCEPTABLE—Good

DU PONT Duce Gloss (E. I. du Pont de Nemours & Co., Wilmington, Del.), \$2.97. A good all-around paint. Some colors carried label warning as to lead content; label formulation data and CU's tests indicated other colors were likely to be "safe." 16 ready-mixed colors.

GLIDDEN Japalac (The Glidden Co., Cleveland), \$2.79. Superior resistance to dry abrasion and chipping make this paint especially suitable for "knock-about" and metal furniture and for outdoor use. Not recommended, however, for use in homes with toddlers; none of CU's samples carried a label warning as to lead content, but formulations given on labels of several colors indicated a high lead content, and CU's tests of one such color (green) confirmed this fact (see story). Some stains were relatively hard to remove from light colors. 17 ready-mixed colors.

MOORE'S Impervo High Gloss (Benjamin Moore & Co., NYC), \$2.25. A good all-around paint. Some colors carried label warning as to lead content; label formulation data and CU's tests indicated other colors were likely to be "safe." 19 ready-mixed colors.

NATIONAL LEAD Dutch Boy (National Lead

Co., NYC), \$2.75. Although judged at least good in most characteristics, inferior for "knock-about" or metal furniture or for outdoor use (see story) because of relatively inferior resistance to dry abrasion and chipping. Some colors carried label warning as to lead content; label formulation data and CU's tests indicated other colors were likely to be "safe." 19 ready-mixed colors.

PATTERSON-SARGENT BPS Super Glosfost (The Patterson-Sargent Co., Cleveland), \$2.75. A good all-around paint. All colors labeled "safe" as to lead content; label formulation data and CU's tests indicated that the claim was likely to be reliable. 16 ready-mixed colors.

PITTSBURGH Waterspar (Pittsburgh Plate Glass Co., Pittsburgh), \$2.73 (\$3.18 for "Fiesta Red"). A good all-around paint and best overall in appearance characteristics. White had better hiding power than the white of most other brands. Not recommended, however, for use in homes with toddlers; some colors carried label warning as to lead content, but tests of one color (black) not so labeled on the can revealed slightly more than 1% lead content (see story). Only fairly good in drying time (one color took more than 8 hours to dry through). 20 ready-mixed colors.

PRATT & LAMBERT Effects (Pratt & Lambert, Inc., NYC), \$2.61. A good all-around paint. White had better hiding power than white of most other brands. Not recommended; however, for use in homes with toddlers; some colors carried label warning as to lead content, but tests of two colors (green and yellow) not so labeled revealed slightly more than 1% lead content. One of the slowest-drying brands tested (two colors took more than 8 hours to dry through). 16 ready-mixed colors.

SEARS Master-Mixed Lead-Free Four Hour (Sears, Roebuck), \$1.79 plus shipping. Superior resistance to dry abrasion and chipping make this paint more suitable for "knock-about" and metal furniture and for outdoor use. Only fairly good, however, in hiding power of white, resistance to scrubbing wear, and drying time (one color took more than 8 hours to dry through). All colors labeled "safe" as to lead content; label formulation data and CU's tests indicated claim was likely to be reliable. This combination, coupled with superior "knock-about" properties, make *Master-Mixed* a likely choice for toys and for other uses in homes with toddlers. 27 ready-mixed colors.

SHERWIN-WILLIAMS Enameloid (The Sherwin-Williams Co., Cleveland), \$2.77. Se-

Old paints may take very long to dry. Some may become seedy (i.e. show uniformly distributed, tiny spots or bumps on the painted surfaces). If you have any reason to doubt the condition of your paint, first brush it out on a piece of wood to check drying time and appearance.

Tube colorants are available in most brands for purchasers who want shades not available either ready-mixed or by combining ready-mixed paints. However, the use of tube colorants may result in increased drying time and decreased film hardness. Therefore, they should be used cautiously—for making light or pastel shades, not deeper colors. Where possible, the use of intermixes is recommended instead of tube colorants.

How much lead is safe?

Recommendations of the American Standards Association and the American Academy of Pediatrics have set 1 per cent as the maximum "safe" lead concentration for the

film of paints to be used on toys and other articles "likely" to be chewed by small children. In New York City and a few other communities around the nation, if a paint film contains more than 1 per cent lead, the label must, by law, carry this warning statement: "Contains lead. Harmful if eaten. Do not apply on toys, furniture or interior surfaces which might be chewed by children."

These recommendations and requirements reflect the fact that some children who have chewed surfaces coated with paint containing lead have suffered lead poisoning. According to Dr. Leroy E. Burney, the Surgeon General and head of the U.S. Public Health Service, nearly all such cases "are reported among those in the age groups one to three who have eaten considerable quantities of lead paint from walls, window sills, home-painted furniture or other surfaces accessible to the toddling child, usually in older houses painted with old-fashioned lead paint."

As a first step in CU's study of the lead content in these

terior resistance to dry abrasion and chipping make this paint especially suitable for "knock-about" and metal furniture and outdoor use. White had better hiding power than the white of most other brands. Only fairly good, however, in ease of old-stain removal and resistance to scrubbing wear. None of the colors carried label warning as to lead content; label formulation data and CU's tests indicated all colors were likely to be "safe." This consideration, and superior "knock-about" properties, make this brand a likely choice for toys and for other uses in homes where there are toddlers about. 16 ready-mixed colors.

WARDS Certified All-Purpose Silicized (Montgomery Ward), \$1.85 plus shipping. A good paint for use where ease of cleaning is especially important, because it was best in ease of old-stain removal. White had better hiding power than white of most other brands. Inferior for "knock-about" or metal furniture or for outdoor use because of relatively inferior resistance to chipping. One of the slowest-drying paints tested (two colors took more than 8 hours to dry through). Some colors carried label warning as to lead content; label formulation data and CU's tests indicated other colors were likely to be "safe." 17 ready-mixed colors.

ACCEPTABLE—Fairly Good

DEVOL Mirrolac (Devco & Reynolds Co., NYC), \$2.75. Judged less than good in more important factors than any other paint tested; only paint judged less than good in the very important factor of leveling. Inferior for "knock-about" or metal furniture or for outdoor use because of relatively inferior resistance to dry abrasion and chipping. Also, somewhat inferior in resistance to scrubbing wear. Some colors carried label warning as to lead content; label formulation data and CU's tests indicated other colors were likely to be "safe." 18 ready-mixed colors.

MAJOR CHARACTERISTICS OF HIGH GLOSS ENAMELS TESTED

The table below is primarily designed to indicate those important test criteria in which the brands of enamels varied relatively widely. However, uniformity of color and gloss also are included, though differences among brands were small. CU considers them to be the most important characteristics of these paints. Ratings also listed within groups in alphabetical order.

	APPEARANCE				WEAR AND TEAR CHARACTERISTICS			
	Drying time	Color and gloss uniformity	Leveling	Resistance to dry abrasion	Resistance to scrubbing wear	Resistance to dry abrasion	Resistance to scrubbing wear	
ACCEPTABLE—Fairly Good								
BY EIGHT	G	E	VG					
CLINCH	G	E	VG					
MOORE'S Enamel Rich Gloss	G	E	VG		VG	G	VG	
NATIONAL LEAD Rich Key	G	E	VG	G	G	VG	FG	
PATTERSON-SILICENT EPS Super Enamel	G	VG	E	G	G	G	G	
PITTSBURGH Enamel	FG	E	E	VG	G	VG	G	
PRATT & LAMBERT Enamel	F	E	G	VG	VG	G	G	
SEARS Enamel Rich Lead-Free Fast Flow	FG	VG	VG	FG	G	FG	VG	
SHERWIN-WILLIAMS Enamel	G	E	G	VG	FG	VG	F	
WARDS Enamel	F	VG	G	VG	G	G	F	
ACCEPTABLE—Fairly Good								
DEVOL Mirrolac	F	E	FG			FG	F	
Key: E=Excellent, VG=Very Good, G=Good, FG=Fairly Good, F=Fair								

Key: E—Excellent, VG—Very Good, G—Good, FG—Fairly Good, F—Fair.

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paints, the color charts and the labels for all ready-mixed colors available in 11 of the 15 brands in the project were carefully examined. While CU was not able to examine a complete set of labels in the other four brands—*Glidden Japalac*, *National Lead Dutch Boy*, *Pratt & Lambert Effecto*, and *Jet-Dri*—it examined enough of them to supplement its tests in estimating, to its own satisfaction, the reliability or unreliability of the labeling of those brands.

Three categories

On the basis of their labels, the paints tested fell into three groups: 1) those in which all colors were labeled "safe" as to lead content; 2) those in which the safety of all colors was implied by the absence of any label warnings as to lead content; and 3) those in which some colors carried label warnings as to lead content, and the safety of the rest was implied by their lack of label warnings.

CU selected one to three colors in each brand for lead-content analysis. Each sample analyzed met these two criteria: 1) It was one of the three popular colors (yellow, green, and black) most likely, in the opinion of CU's consultants, to have a relatively high lead content. 2) Its safety was either explicitly claimed on the label or implied by the

absence of a warning. The deepest shade meeting the second criterion was chosen.

The lead concentration in the tested colors of 12 brands proved to be 1 per cent or less. These test results, together with an examination of the formulation data given on the labels and of the information on the various color charts indicate the likelihood that most of the manufacturers of the paints tested have complied with the New York City law and the A.S.A. recommendations, and that their labeling, or lack of it, as to lead content can be relied on. However, the one color ("Empire Green") of *Glidden Japalac* that was tested had a very high lead content—12.5 per cent; and *Pittsburgh Waterspar* and *Pratt & Lambert Effecto* samples slightly exceeded the "safe" maximum. (According to the manufacturer, the label information for *Japalac* is being rectified, and the name of the product is being changed to *Japalac Alkyd Gloss Enamel*. *Pittsburgh Waterspar* indicated on its color chart, but not on the label, that its black was unsafe for use on children's furniture.)

On the other hand, the experience of CU's shoppers suggests that shopkeepers and clerks may not be reliable guides as to the safety of the paints they sell. Some sales personnel represented as safe for use on toys and children's furniture paints that were clearly labeled as unsafe for this purpose. In the 12 brands whose labeling appears reliable, the consumer's best guide is the label itself.

JET-DRI—VERY QUICK-DRYING, BUT . . .

Jet-Dri is a new enamel which the manufacturer (Jet-Dri Div. of Consolidated Chemical & Paint Mfg. Co., Inc., NYC) claims "dries in 15 minutes" and is the "fastest-drying enamel made."

CU ran samples of *Jet-Dri* through the same test series as it did the regular enamels covered in this report. It proved to be quick-drying indeed, although not quite so spectacularly quick as the maker claims. Its black dried through in a half-hour, its white in about an hour, and its dark green in under two hours—as compared with a dry-through time of five to eight hours for most of the regular brands tested.

Like most of the other enamels, *Jet-Dri* was rated Good in overall quality, despite deficiencies in some specific characteristics.

The product was rated only good in color and gloss uniformity (poorer than any other brand tested) and good in leveling; therefore, it was judged capable of producing a good but not outstanding finish on a properly prepared surface. It was rated only fairly good in impact resistance, scratch resistance, and hiding power of the white. It was judged one of the poorest brands tested in resistance to dry abrasion.

Because of its relatively inferior dry-

abrasion, impact, and scratch resistance, it would not be a good choice for use on toys or other "knock-about" items, or on metal furniture or for outdoor use.

On the other hand, *Jet-Dri* was rated excellent in ease of old-stain removal and resistance to sagging, and very good in resistance to scrubbing wear. In gloss, the black and dark green were similar to the semi-gloss enamels, the white to the high-glosses. (For a discussion of the significance of the factors listed here see the main body of this report.)

A word of caution

Because of its fast drying characteristics, CU wanted to know whether *Jet-Dri* poses more of a fire-hazard than other brands. Therefore, CU subjected the paint to a standard flammability test. The Interstate Commerce Commission and some local and state governments define a flammable liquid as one which, at a temperature of 80°F or less, gives off vapors which will ignite, or flash, when exposed to a flame under specific conditions. In CU's tests a number of colors of *Jet-Dri* were tested and all flashed below 80°F.

Temperatures in this range are, of course, common in homes, especially in summer, so *Jet-Dri* must be used with

special caution. No flame—or even a lighted cigarette—should be permitted in the painting area until the paint has dried.

Jet-Dri was correctly labeled as being "flammable." Some regular enamels in the project also were labeled "flammable," but when CU tested them for flammability, their flash points all turned out to be above 110°F. The term "flammable" apparently is rather loosely used in the paint industry.

Adequate ventilation is particularly important with *Jet-Dri*, because it is more volatile than the other enamels and may produce a greater initial concentration of fumes after application. Also, some people may object to its odor, which is sharper than that of the other paints.

While *Jet-Dri's* color-chip chart wrongly indicated that all colors were "non-toxic," some colors carry a warning concerning lead content on the can label itself (see page 377). CU's lead-content analysis of three colors, and the fact that other colors likely to contain lead had warnings, indicated that *Jet-Dri's* can labels are likely to be reliable as to safety.

The list price for one quart of *Jet-Dri* in the New York City area is \$2.95. Twenty ready-mixed colors are available.