

FREQUENTLY ASKED QUESTIONS ABOUT MODEL PAINTS

FAQS

23 September 2014 - NOTE

Please note that the text in our FAQs (Frequently Asked Questions) dates back to the year 2012. We are now working on updating the information, since we have introduced new colors, new auxiliary products and a new line of colors- Game Air – since then. Our team of model painters are constantly testing our new formulas, and new ways of using existing products that are then posted on our Facebook page and Youtube channel. We will include most of these tips and usage instructions in our FAQs as well, but it will take some months before these are available on the web and in a new, printed version.

AV
vallejo

Index

1/ General questions	2	9/ Water and Stone Mediums	6
2/ Model Color	3	10/ Varnishes	7
3/ Panzer Aces	3	11/ Auxiliary Products	8
4/ Game Color	4	12/ Premium Color	9
5/ Model Air	4	13/ Color Names and Equivalencies	9
6/ Metallic Colors	5	14/ Vallejo Brushes	10
7/ Primers	5	15/ Health and Safety	10
8/ Pigments, Washes and Filters	6		

1/ General questions



1.1. What is the difference between Model Color, Game Color, Model Air and Premium?

Vallejo offers four different water-based chemical formulas in these colors lines, each one created for a particular segment of the hobby market, but all compatible with one another.

Model Color and Panzer Aces are creamy, highly opaque acrylics formulated principally for brush application: the two ranges total some 246 matte colors and mediums, and 8 brilliant alcohol based metallic colors. Game Color has been developed for tabletop games. The range consists of 119 acrylic colors, washes and inks; designed for painting small figures, the formula has a lower viscosity than Model Color and a resin more resistant to frequent handling. The colors provide opaque coverage without loss of minute detail.

Model Air is a line of 129 colors which have been formulated especially for airbrushing, although they are also frequently used for painting small details with a brush.

These product lines are further augmented with a line of Washes, and a complete assortment of Medium, Varnishes and auxiliary products. Premium Color, a new range of 51 colors and 8 auxiliary products, developed with a new hybrid acrylic-polyurethane resin of extreme strength, has been designed principally for use in an Airbrush and for surfaces exposed to handling and exterior conditions.

1.2 Can I mix Model Color with Game Color and Model Air?

Yes, all our acrylic colors can be mixed with one another and with our Mediums and Varnishes.

1.3. Can I mix Vallejo acrylic colors with other brands of paint?

Our acrylic colors can be mixed with all waterbased acrylics.

1.4. Is Model Air to be used only in airbrushes?

Model Air has been formulated especially for use with an airbrush, but it can be applied with a brush, and is especially useful for small details and shading.

1.5. Can I apply Model Color or Game Color with an airbrush if I dilute them with water or a thinner?

Yes, but it depends on the colors. Please consider that Model Air and Premium have been formulated especially for airbrushing, while some colors in Game and Model Color are not suitable for being dispersed in the air, see please points 2.11 and 15. Health and Safety.

1.6 Can I mix your new Premium Color with Model Air or Model Color?

Our clients have mixed these products, especially in airbrushing techniques, and there is no problem of separation or sedimentation. Still, Premium has been developed with a new resin, a water-based hybrid of acrylic an polyurethane and some of its properties of resistance and permanence might be diminished in mixtures with other products. Until now we have not observed any incompatibility between Premium and other 100% acrylic resins, but Premium is so new that we do not yet have any long range experiments

1.7 Are there acrylic model paints in the market which are not waterbased?

Yes, and these acrylics, solvent based, should not be mixed with waterbased products.

1.8 How long do your acrylic colors take to dry?

Acrylic colors dry when their water content evaporates, and the time depends on the surface, the thickness of the paint film, and the humidity and meteorological conditions of the work place. In the case of Model Color and Game Color paint will seem dry to the touch very quickly, but optimum adherence to the surface and maximum resistance to scratches and dents may not be achieved until after 48 hours or more of drying time. In the case of Model Air, the very fine coat applied with an airbrush dries within seconds, so that further coats of paint can be applied immediately.

1.9. You have equivalency tables between your colors and other brands, why do you not include your artists colors in these tables, why is this?

The formula of our modeling colors is completely different, and although we employ the same pigments, it is not possible to give equivalent values in artistic ranges since even basic colors such as white, black, etc. would not be very useful to the model painter due to their high viscosity.

1.10. In your artists' colors you identify the pigments, why do you not do the same in your model painting ranges?

With the exception of the basic colors, most of the tonalities in the model color ranges are the result of painstaking color-matching to achieve the very same shade employed at a particular time for weaponry and armor, and the naming of all the pigments employed for each color would take up too much space. However, on our web page we list all the pigments used in the manufacture of our model painting colors, even if we do not specify each individual combination.

1.11. Where are your products manufactured?

Vallejo has been manufacturing acrylic colors for fine arts since 1970. The factory, situated near Barcelona, Spain, only manufactures acrylics and water-based colors. Our paints for models and miniatures are exported world wide.

1.12. I purchased some bottles of paint just like the Model Color bottles but they do not carry your name or logo, do you manufacture colors for others?

The first range of Model Color was presented in 1992, and since then we have been using the same 17ml. bottle, common in the pharmaceutical industry. The choice of this bottle was very successful and recently one or two other brands of paint have been introduced with the same or very alike packaging, causing some confusion about the identity of the manufacturer. For this reason, since 2005 all colors manufactured Vallejo are presented with our name and logo imbedded in the base of the bottle. This logo warrants that the contents are manufactured by Acrylicos Vallejo; the identification of the manufacturer is very important, because all products manufactured by our company have been qualified as conforming to the European standards CE, EN71/3 and REACH, and to the USA certification ASTM, which guarantee our compliance with these norms established for the safety of the user as well as of the environment.

2/ Model Color



2.1. Who invented Model Color?

Spanish model-painters, having worked with solvent based paints, began to use some of our fine-arts acrylics in the 1980ties; they eventually suggested changes and modifications in our formulas, and we designed a product in accordance with their needs. After some years of development, this was to become Model Color. The product has a complicated chemical composition, and formulas are revised constantly in accord with new developments in technology, availability of new resins and raw materials, changes in pigments, and updated regulations and environmental concerns.

2.2. Was Model Color the first acrylic color used for models?

Model Color was the first water-based acrylic used for model painting. Some other acrylic brands were available, but they were solvent based. Not all acrylics are water based.

2.3. What is the advantage of acrylic colors over solvent based products?

The most important considerations are health and environmental factors.

2.4. What makes Model Color different from other acrylic colors?

The colors were developed to have perfect adhesion even on non-porous surfaces such as metal and plastics. They are made with finely ground permanent artists' pigments and the best available resins, but there are many other ingredients in the formula that make this a very special product.

2.5. What is the difference between Model Color and Artist's Acrylics?

The ingredients are similar, but the formula is completely different. Most evident is the viscosity: Artist' Acrylics have a high viscosity, and this will show brushstrokes and allow volume, as it should. Model Color has a creamy consistency, is thixotropic and self-leveling; the low viscosity renders a perfectly flat, opaque and matte finish without traces of brushes strokes.

2.6. What is the shelf life of your Model Color paints?

The shelf life depends on the storage conditions. Our colors are formulated to withstand freezing and thawing. Normally the colors should be fine for at least 5 years, but we have tested some colors much older than that (10-20 years) and they are still workable. The colors do not "spoil" and unless exposed to extreme heat will not dry out either but the water content will evaporate eventually. Heavier pigment tends to settle, and the small bottle may cause some difficulty in restoring the balance in the consistency; if paint has settled heavily, first make sure the eyedropper tip is not blocked with dried paint, and restore the emulsion by rolling the bottle between your hands rather than shaking it.

2.7. I have a problem with Model Color, it does not seem to go on smoothly.

The pigment may have settled too much. Add two drops of Crackle Medium (70.598) and mix the contents of the bottle by rolling it between your hands.

2.8. I have some paint I purchased years ago, and pigment has separated from the binder. How can I best restore the original mixture?

The best way to stir the product is not so much by shaking the bottle, as by squeezing the bottle and then rolling it between your hands. Please us this method and try the color on some other surface first to see if the blending has been successful. Also see point 2.7 for trying to restore balance between pigment and binder.

2.9. Do I have to use a Thinner with Model Color?

You may want to use our Thinner (70.524) if you are painting very small details. This thinner does not contain solvents, it has the same formula as the colors but without pigment.

2.10. Can I use Model Color in an airbrush?

For use in airbrushing, we especially developed Model Air, it has the specific chemical composition and the right viscosity- no thinner is needed - but many artists use Model Color in airbrushing for reasons of color range, opacity and availability. Some colors contain Cadmium, these should not be sprayed, so please also see points 2.11, 5.12 and 15.3.

2.11. I just purchased some bottles of Model Color, and on two of them the label says: Do not spray. The other bottles do not have this advice. Is this an omission? Should this be on all the Model Color bottles?

No, this phrase or a pictogram of an airbrush crossed out, is printed only on some labels in compliance with California Proposition 65, which requires this instruction for all colors which may contain a trace of Cadmium. A total of 38 of the 180 colors of the Model Color line carry this advice; for more information please see 15. Health and Safety, also see our web page www.acrylicosvallejo.com under Health and Safety and Pigment content per color.

2.12. Can I mix Model Color with Model Air or with Game Color?

Yes, our products are completely compatible with one another, but the different viscosities may affect the end result. Mixing should be done with care, and our mixing bottles may be helpful to get the right proportion.

3/ Panzer Aces



3.1. What are the Panzer Aces Colors?

Panzer Aces colors are 48 shades especially selected by the editors of the Panzer Aces magazine (www.euromodelismo.com). The Editors of this magazine specialize in WWII weaponry and uniforms, and considered these colors essential for the correct painting of WWII uniforms and certain camouflage patterns of the Waffen-SS in World War II.

3.2. How are these colors different? Are Panzer Aces Color not the same as Model Color?

They have the same chemical formula as Model Color, i.e. the viscosity, opacity and other chemical properties are the same, but the colors are different: based on historical research carried out by the editors of the Panzer Aces publications, they are a very true match to the originals.

3.3. I bought a set of 16 Panzer Aces Camouflage colors which has both the name Model Color and Panzer Aces on the label, is this part of the series?

These 16 colors were chosen by the Panzer Aces editors for some additional camouflage patterns, but since they already existed in the Model Color line, they were only given a special label. You will also find these colors in the complete Model Color series, but the set indicates how to use them in the camouflage patterns of Panzer Aces.

3.4. Where can I obtain the Panzer Aces magazines?

The best source for dealers would be to consult the publi-sheer in Madrid, Spain: accionpress@euromodelismo.com. In the United States the magazine (some issues are called Armor) is distributed by MD Squadron, www.squadron.com.

3.5. Can I use Panzer Aces for air brushing?

Like Model Color, Panzer Aces has not been formulated for airbrushing, we suggest Model Air for this purpose. Please also see 2.11 and 15. Health and Safety.

4/ Game Color



4.1. What is the difference between Vallejo Model Color and Vallejo Game Color?

Game Color was designed for painting tabletop game miniatures, and the size of these figures and their minute details demanded a more fluid consistency; the viscosity of the colors of the basic range of Game Color is 1500-4000 centipoises* as opposed to the Model Color viscosity of 4000-6500 centipoises. The 8 Game Washes and 10 Inks have even less viscosity, they are very fluid.

*Centipoises: Measure of viscosity. Water has 0,89 centipoises.

4.2. Are the new extra opaque colors in Game Color similar to Model Color?

Yes, for these 16 Extra Opaque colors, the Model Color formula was used, since the viscosity of this formula supplies the opacity needed for a quick, one-coat base or foundation application.

4.3. Game color seems to dry more quickly than Model Color, is this correct?

Yes the drying time is less, and the resin is more resistant. Tabletop game figures are handled frequently and it was advisable to employ a harder resin, in this case a 100% acrylic binder.

4.4. Are the colors in Game color the same as in Model Color, only more liquid?

No, we produced a selection of colors designed for Fantasy Figures, and although the basic colors (red, blue, etc.) may be alike, the major part of the range will not have any match in Model Color, always excepting the 16 colors in the Extra Opaque series, which have exact equivalents in the Model Color range.

4.5. Is Game color safe for use by children?

Yes, the product can be used by children over the age of 3, it was formulated with that purpose in mind. Beside the ASTM certification, Game Color also has obtained the EN71/3 Certification, see also 15.6 Health and Safety.

4.6. Can I use Game Color in an airbrush?

These colors were not developed for airbrushing, and you would find that the formula of Game Color will dry too quickly in the airbrush; we recommend Model Air, which has been especially created for air brushing.

4.7. What is the difference between the Game Color Inks and the Washes?

The Game Color Inks are more highly pigmented than the Washes, and contain more acrylic resin. This makes the inks more resistant, they have more body and can be thinned down and mixed more easily. All washes are, as the name implies, very liquid. Both products are transparent and used for shading and blending, and to augment the details and deepen the shadows. When applied all over the surface of the model, they will enrich and modify the final color. Also see point 8. Pigments, Washes and Chipping.

4.8. When I shake the Game Color paints thoroughly, before using, and then take off the cap, paint starts to bubble out of the top and goes to waste. Is there a solution to this problem?

Shaking the paint creates foam: the oxygen in the bottle (between cap and paint) mixes with the paint and expands the volume, so that it bubbles over when you open the bottle. The correct way of mixing the product is rolling the bottle, between your hands, or on the table. But the foam will subside after a few minutes, and no harm is done.

4.9. Can the Game Color Metallic Colors be varnished?

Yes, all the Metallic Game Colors can be varnished with our regular lines of Acrylic, Polyurethane and Aerosol varnishes. See below in 6.1. Metallic Colors.

4.10. I have seen a small display with a Header reading "Game Color Basic Color Combinations". Is this a different product?

No, this display is a starter unit which contains the most popular colors with their highlights and shadows. A selection of Base Color, Highlight and Shadow color is also printed in our Game Color colorchart.

4.11. Do you have base and layer colors, shade colors, glazes and textures in Game Color?

We would consider the basic 79 color Game Color range as a layer color. Our 18 Washes and Inks are used for shadowing and glazing, and the 16 Extra Opaque Colors for foundation (base color) and dry-brushing. A range of Textures is available in our Water and Stone series.

5/ Model Air



5.1. What is the difference between Model Color and Model Air?

Model Air has been especially formulated for airbrushing. The product is very liquid, with a maximum viscosity of 200 - 400 centipoises, all pigments used are safe for dispersal in the air, and the color can be applied directly from the bottle.

5.2. Must I use a thinner for the Model Air Colors?

Model Air can be applied without using thinners, but even so, we find that almost everyone has the habit of thinning the product no matter the size of the needle. Please see point 5.3.

5.3. If I want to use a thinner, what product and in what proportion do you recommend?

Our airbrush specialists claim that a thinner is not necessary, but they consider it can be used up to a ratio of 1:3. The Vallejo Airbrush Thinner (Ref. 71.061) does not change the adherence or coverage of the Model Air colors, and delays the need for cleaning the airbrush.

5.4. I have read about the use of the Drying Retarder with Model Air, and also of the Airbrush Cleaner.

Some airbrush specialists use a few drops of these products or distilled water to improve the flow and delay slightly the need to interrupt the process of painting to clean the airbrush during use, but this may also affect the quality of the sprayed paint and is a question of practice and technique. The Airbrush Thinner 71.061(see above) is the most commonly used auxiliary product.

5.5. Should I use a Primer before applying the color?

We always recommend the use of a primer, it prepares the surface and improves the adherence of the paint film. Please also see information under the heading, 7. Primers.

5.6. How many coats of paint will I have to apply?

Some colors cover more than others, but usually between three to four coats of Model Air will be needed for a perfect finish. You will want to wait a few minutes in between coats, depending on the humidity in the workplace.

5.7. Can I use a hair dryer to speed up drying?

A hairdryer can be used, but use a low temperature setting and be careful to avoid aiming direct blasts of hot air at the model.

5.8. How long do I have to wait before spraying on the final coats of varnish?

You should be able to apply a coat of varnish about 20 to 30 minutes after the coats of paint have dried; about three coats of varnish will give best results.

5.9. Will Model Air work on metal surfaces?

Model Air will work on metal surfaces, but when painting metal it is especially important to use a primer first.

5.10. I want to obtain a satin finish, can I add some gloss varnish to Model Air to achieve this?

Yes, you can add a few drops of satin or gloss varnish to the color, right into the cup of the airbrush.

5.11. I want to airbrush with Vallejo colors on a surface primed first with a solvent based enamel color, will this work?

Yes and some model painters recommend using a coat of acrylic varnish on enamel (on a solvent based product) to protect the enamel surface from possibly aggressive products like other solvents and solvent based fillers.

5.12. Model Air is manufactured especially for airbrushing. Do I need to wear a mask when I use the product?

Model Air contains no harmful pigments, but wearing a mask when airbrushing is always a good idea. Anything foreign in the air we breathe, be it dust or pollen, is best not inhaled, and pigment particles, even if not toxic, are still foreign matter.

5.13. What is the minimum size nozzle required for the use of Model Air to avoid further thinning?

The nozzle size to use depends more on the size of the model. Please see below 5.14

5.14. What size of nozzle should I use for painting a model size 1:220?

Some artists use a needle as small as even a 0.15 but we would recommend a needle size 0.2 or more. The size of the needle also depends on the size of the model. One of our specialists recommends the following scale/size ratios:

Model Size	Recommended Needle Size
1:220	0,15 mm.
1:72	0,25 mm.
1:35	0,35 mm.
1:16	0,35-05 mm.

For models larger than 1:16 we recommend nozzles size 0,5 mm. to 1,2 mm.

5.15. What pressure should I use when airbrushing with Model Air?

We recommend PSI of about 20-25 (1.38-1.66 Bar) or 0,5-1 kgs.

5.16. How large an area can I cover with Model Air when applying the color with an Airbrush?

We estimate that you can cover approximately 2500 square centimeters with one 17 ml. bottle (50x50cm).

5.17. Should I use alcohol to clean the airbrush?

Alcohol will work, but we recommend the Vallejo Airbrush Cleaner (Ref. 71.099), which besides alcohol contains other ingredients to clean, lubricate and protect the airbrush mechanism. Pour the cleaner right into the cup, raise the compressor pressure to 1-1.5kgs. and spray on tissue paper until the mixture comes out clean.

5.18. My airbrush keeps clogging up, what can I use to remedy this?

Paint will dry faster in an airbrush because of the airflow through the nozzle. And if you stop briefly, the nozzle tip will have to be cleaned. Always run some Airbrush Cleaner through the airbrush, and spray on paper until the spray comes out clear. Please see our webpage and leaflets for more detailed instructions.

5.19. How do I use Liquid Masking Fluid?

This transparent Medium (70.523) is applied precisely on the part of the surface you want to protect. Once you have finished painting the surrounding area, the masking fluid, a rubbery film, is peeled off. Do not leave the masking fluid on the model for a long time, it will become too dry and difficult to remove.

6/ Metallic Paints

6.1. Is it true that water-based metallic paints should not be varnished, is there a chemical reaction?

There is no chemical reaction, but some colors are made with metallic pigments & these are more brilliant than the acrylic varnish; these particular colors are best not varnished. Please see more details below (6. 2 & 6.3).

6.2. Can I varnish water-based Metallics in the Model Color and Game Color lines?

Yes, these gold and silver colors have a soft glow, they are part of the iridescent-metallic line of products, and their brilliance will be increased by the application of a high gloss varnish.

6.3. Should I varnish the water-based Metallics in the Model Air line?

Some of the metallic colors in the Model Air range are made with aluminum and copper-zinc alloys, which will not rust in a water base, but the metal in these colors will only be dulled by applying a varnish, and these colors are best not be varnished at all. The aluminum and copper-zinc alloy pigmented colors which are better not varnished are the Model Air references from 71.062 to 71.068. The Model Air iridescent colors reference numbers 71.69-71.073 can be varnished; varnish will enhance them.

6.4. Varnishing Alcohol-based Metallic Colors (35ml).

In the Model Color line, we present a special range of metallic colors in 35 ml. pots; this range consists of colors manufactured with actual metal particles. These alcohol based metallic colors have such a strong shine that a varnish would actually make them duller, but it will not harm them. They can be varnished for reasons of protection, but no need, and they will be more brilliant without varnish. (References 70.790 to 70.797).

6.5. I purchased your alcohol-based Metallic Gold 70.791, but it has all coagulated at the bottom and has a dirty brown color.

The alcohol based metallic pigments will tarnish immediately if in contact with water, and even contact with a paintbrush which has been rinsed in water and still moist may cause the paint to rust and coagulate, which causes the dark brown color. The labels states "Clean Brushes in Alcohol" and the colors are available only in the 35ml. pot with the child-proof label.

6.6. I heard that surface painted with your Alcohol based Metallic Colors can be protected from oxidation with an Anti Rust Varnish, but can no longer find this product in your catalogue, is this an error?

No, our Anti Rust Varnish has been discontinued because we have changed the formula of our alcohol based metallics (References 70.790 to 70.797) to include an anti rust protection; once dry, the paint film is protected against oxidation and needs no further varnish.

7/ Primers



7.1. Why do I have to use a primer?

Primers, also known as sealers, are formulated especially to provide the correct undercoating for binding the paint to the surface of the model. They are an important first step in the whole procedure of model painting.

7.2. What is so different about the new Vallejo Primer?

The most commonly used primers were aerosol sprays, they were the quickest and most effective way to cover the model with an extremely fine base coat. But Aerosols are not always reliable, the paint in the cans, even if water-based, needs to be composed with volatile ingredients which allow it to be sprayed, and in use the opening of the spray nozzle frequently plugs up and is difficult to clean. Vallejo has formulated a revolutionary primer with an extremely durable, water-based acrylic-polyurethane resin. This new primer can be applied with an airbrush, most precise for fine details; the new primer is self leveling and can also be applied easily with a soft varnishing brush.

7.3. Can I dilute the new Acrylic-Polyurethane Primers for use in an airbrush?

They seem thicker than Model Air. The new acrylic-polyurethane primers are especially formulated for use in air brushing. The special quality, the polyurethane component, which gives it the strength and the resistance to nicks and scratches, will be diminished by diluting the product, but the product can be diluted with our Thinner or even with distilled water. To maintain its special qualities, the less dilution the better.

7.4. What size nozzle should I use with your Surface Primer?

Our expert suggests a nozzle opening of 0.35 mm and with that no dilution is necessary.

7.5. Is your Model Air color 71.097 the same product as the new primers?

No, this is simply a grey color, created years ago in the Model Air Line. We are changing the name to Base Grey precisely in order to avoid misunderstanding.

7.6. Can I apply the Vallejo Aerosol primer on a surface of polyester putty?

The Vallejo Aerosol primer can be sprayed on polyester and other plastic surfaces without any problem, the formulas are compatible.

7.7. Is the Vallejo Aerosol primer compatible with a water-based, two component aerosol color for application on a vehicle body?

I want a matte finish and protect the colors against the sun. Our water-based aerosol primer can be applied without problems as a base-coat for further painting with other water-based colors.

7.8. Why is it so difficult to obtain your Aerosol Primers?

International shipping regulations control the transport of aerosol products, they cannot be shipped by airfreight, and most ocean freight companies will handle only complete containers of the product, which is not always commercially feasible.

8/ Pigments, Washes & Chipping

**8.1. Are the Vallejo pigments the same pigments as used in the Vallejo colors?**

No, they are not fine-art color pigments: except for one reference, we have used non-micronized natural earth and oxide pigments. These natural pigments have some impurities which render them perfect for the creation of dust, mud and rubble. In manufacturing our colors, we use exclusively fine arts pigments, which are micronized for optimum color value and purity.

8.2. I have tried to dilute your pigments with thinner to make a wash, but I find that the pigments don't seem to dilute completely. Is the particle size too large?

You may be accustomed to micronized and synthetic iron oxides, which have a smaller particle size. Since we manufacture ready-made washes, we did not contemplate the use of pigments for this purpose, and chose natural earths as most indicated, see 8.1 above. Only Green Earth (73.111) is a micronized pigment, can be recommended for a wash.

8.3. What product should I use for binding the Pigments?

A slow drying medium is best, such as our Pigment Binder, Ref.26.233. This product is a water-based, slow drying acrylic, and allows for working time to move the pigments around and into the model or diorama.

8.4. What is the difference between Washes, Filters, Shades and Accent Colors?

The difference may be in the degree of opacity and chemical composition (some of the currently available Filters and Accent Colors are solvent based) but generally speaking Washes are transparent colors with low viscosity, they can be applied all over the model to affect a subtle changes in tonality, and they easily flow into recessed areas to accent and shadow the finer details of the model; Filters, slightly less transparent, are usually applied all over the model to cause a slight change to the appearance of the basic color.

8.5. Can I bind the pigments with your water-based washes?

Yes, the Game Color Washes and the new Model Washes, both transparent, water-based acrylics- are often used to bind the pigments for effects of mud, earth and dirt; they also work very well in combination with Gels and Texture Pastes of the Water and Stone range.

8.6. Can I use the Model Wash or the Game Color Wash on an acrylic base coat?

Yes, but ensure the acrylic base has dried thoroughly before applying the wash.

8.7. How should I dilute the Washes?

The washes have been formulated so as not to need further dilution, but if you need a lighter tone, you may dilute with a transparent, such as Acrylic Mat Medium 70.540, or water. (Please use distilled water: tap water may contain various types of natural contaminants such as calcium and other substances due to local geological conditions, which may affect the delicate film of a wash.)

8.8. What is the difference between your regular Game Color Wash and the Dipping Formula Wash?

Our acrylic, water-based Dipping Formula Washes in a 200ml. pot are formulated differently from our brush-on washes, so that the small figures used in table top games can be dipped into the pot quickly for a first shading and outlining. The "Dipping" wash will define the creases and outline the details to facilitate the application of color. After painting the figure, a second wash will reinforce the lines and shadows and accentuate the highlights.

8.9. What is the difference between the Game Color Washes and the new Model Wash?

Both products are used for the effects of aging and weathering. The viscosity of the washes is very low, they are almost as liquid as water. The Game Wash formula is intended for the small figures used by tabletop gamers. They are available in 17ml. Our new Model Wash is presented in 35ml. pots and has been formulated with a different resin; the product has been designed principally by the painters of military models to simulate the effects of exposure to weather and wear, accent panel lines and details. Many painters work with both products to obtain the desired effects.

8.10. Can I airbrush the washes?

Yes, both the Game Washes and the new Model Washes are airbrush ready, they are transparent, water-based acrylic colors which do not contain solvents; they both carry the ASTM health label certification.

9/ Water & Stone, Diorama Mediums

**9.1. Should I add water to the various gels for Water Effects?**

I have tried this and it gets very liquid and has not the required gloss effect- too much water? The gels are best not diluted with water. They can be diluted with "Transparent Water" (Ref. 26.201) which will not change the consistency or texture of the gel.

9.2. How should I apply the Water Gels, I tried it with a brush but you can see the tracks of the brush - any solutions?

The gels for Water Effects are best applied with a painting knife or spatula.

9.3. I tried to make a waterfall with your Transparent Water (Ref. 26.201) by applying it on a glass plate, but I cannot seem to peel it off as it shows in your leaflet. What went wrong?

You may have left it on the glass too long. After several days, the adhesion of the Gels may become too permanent depending on the surface. Try applying the product on a flexible sheet of polyester or acetate; by bending the sheet of polyester, the film can be peeled off easier. See 9.4.

9.4. Does the humidity and temperature affect these gels?

Extreme conditions may affect drying; generally speaking the products are best used in moderate temperature of 22° Celsius and humidity of 70%, and are easily peeled from a non porous surface after a drying time of 24 hours.

9.5. How do I change the color of the water?

Depending on the effect desired, (ocean, lake or river) the bottom of the lake or river would be painted black, green, blue or - in the case of a river with pebbles and stones, white and grey; this painted color will be visible through the transparent gel. Water effects can also be colored further with a small quantity of Model Wash, which has the best chemical property for tinting the gels.

9.6. I bought your acrylic gel "Mediterranean Blue" -Ref. 26.202- for creating a water effect on a 1 m square diorama. To create an effect like the one seen in your leaflet, how thickly should I apply the layer of gel?

The gel you see photographed for our leaflet, has been applied with a painting knife and the surface is approximately 1 centimeter thick, with peaks rising to 2 centimeters. More depth can be achieved by allowing one layer to dry before applying the next. Drying depends on the humidity in the air, and can be very slow - it may take several days- even weeks- under extremely humid conditions.

9.7. How do I color Still Water Ref. 26.230?

We recommend you use Model Wash or Model Air. Use sparingly to maintain the transparency of Still Water, and add color gently in order to avoid bubbles caused by rapid stirring. For more color and a more realistic shade, modelers paint the bottom of the area to be covered before adding Still Water, this gives more depth and a more realistic tint to the surface. Please also see 9.5 and 9.6.

9.8. What is the composition of Foam and Snow, Ref.26.231?

The chemical composition is white pigment and resin in a formula which gives it the required soft texture. The product is presented in a bottle with an eyedropper, so that it can be applied directly on waves or trees.

9.9. When I pour Still Water-26.230- into a basin of the diorama, the product seems to dry well at first but after a while it forms a depression in the center. The basin is 3-4mm. deep. How to avoid the depression?

This happens frequently, depending on local humidity conditions, and is solved by filling the center with some more Still Water; depending on the size of the surface, the process may have to be repeated a few times.

9.10. I have completed a lake in a diorama using your Still Water, and applied heat with a hair dryer to speed up drying, but now the water is a cloudy light blue, what can I do?

The application of heat to the top layer of product has trapped moisture below, causing the appearance of a cloud. This moisture will eventually disappear, but it will take some time. Still Water is best applied in thin layers, allowing the water content of the product to evaporate before applying the next layer.

9.11. My old bottle of Still Water carried a St. Andrew's Cross, indicating potentially irritating material, but my new bottle doesn't. What happened?

A new polyurethane resin has become available which has the same properties without the irritating component, and we are pleased to be using this new product for Still Water.

9.12. I have used your Still Water -Ref. 26.230- on top of your Extra Heavy Gel, Ref. 26.535. When the Still Water dried, it shrunk leaving cracks all over the surface. The maximum depth of the water was 1.5 to 2.5mm. What went wrong?

Although the Gel was completely dry, it is still a porous surface, and this affects the drying of Still Water and creates surface tension and eventually cracks. Still Water should be used only on a non-porous surface, or on a surface sealed with varnish.

10/ Varnishes

10.1. I notice that you have different labels on some of the varnishes. Have you changed the formulas?

No, some of our Auxiliary Products have the same formula in all our color ranges, (varnish is one of them) and to avoid that our clients need to stock three different references for the same product, we have recently unified those labels. This new presentation may take some time to arrive at your local dealer, but you will eventually see that the labels for the varnishes and some of the mediums all have the same information and these labels are identical in the three I product lines. Model Color, Model Air and Game Color.

10.2. I find the matte varnish dulls the color too much, and the satin varnish is too shiny. Should I apply one over the other?

No, because the varnish you apply on top will predominate. We would suggest you mix the matte and shiny varnish and apply this mixture on a test surface until you achieve the desired effect.

10.3. I have air bubbles in my varnish, what causes this?

It is important not to shake the varnishes, since it may take several hours for bubbles to disappear. Mixing should be achieved by gently stirring the product.

10.4. What is the difference between the new polyurethane varnish -refs.62.062 , 063 & 064- and your acrylic varnish?

The most important advantage of this new polyurethane is its superior strength and resistance to nicks and scratches, which makes it ideal for surfaces exposed to wear. The varnish is manufactured with a new resin of 100% polyurethane which is self-leveling and offers a stronger protection than acrylic varnishes. Basically it has the same properties as our new Polyurethane Primers, can be applied with a brush or, for airbrushing, and diluted with our Airbrush Thinner (Ref.71.061). Utensils can be cleaned with water after use.

10.5. Can I use your new polyurethane varnish on a model painted with Model Color?

Yes, the Polyurethane Varnish can be applied on Model Color, Game Color and Model Air, but make sure that the paint surface is completely dry. The polyurethane varnishes dry more quickly than the acrylic colors, and form a hermetic surface. If the base color has not dried completely, humidity could be trapped under the varnish and cause problems difficult to solve.

10.6. I used your Satin Varnish, Ref. 70.522 but find it too glossy on this model. How do I remove the varnish without damaging the paint itself?

If you use alcohol or our Airbrush Cleaner, you may find that you are also removing the paint underneath. It would be better to varnish over the coating again with our Matt Varnish, 70.520.



10.7. How can I remove a varnish without damaging the paint underneath?

We manufacture a removable varnish, this product can be eliminated with ammonia which does not affect acrylic paints but will remove only this special varnish. Our Removable Varnish in 60ml. bottles is available in Gloss, Satin and Matt (References. 26.515, 26.525 and 26.550).

10.8. On the label of your Gloss Varnish in 60ml. it says: "Apply with varnishing brush and wait four hours between coats". Somewhere else I read that varnish dries in 15-20 minutes, which is it?

The 60ml. bottle of Gloss Varnish is used mainly also in fine arts, where brush application is most common. If a varnish is applied with a brush, the coat is thicker and more time must be allowed for drying; also the contact with the brush and the movement of the brush will disturb the coat underneath, so that it is very important that the varnish has thoroughly dried. These same varnishes applied with an airbrush in fine layers dry indeed in 10-15 minutes, and since the airbrush does not disturb the previous thin layers, additional coating can be quickly applied.

11/ Auxiliary Products**11.1. What is the use of your Gloss Medium, can I varnish with this product?**

No, the Mediums are never to be used as a varnish; they are not suitable for this purpose. The Mediums (Gloss and Matt) are intended to be mixed with colors or pigments, to change the qualities of these products, to thin them, or to increase transparency or gloss without losing adherence.

11.2. I have used Mat Medium to mix with the Pigments, but I find it dries too quickly. Any solution?

You might want to try the addition of some Drying Retarder, but it would be easier to use the Glaze Medium Ref. 70.450, or the new Pigment Binder, Ref. 73.190 which is especially formulated to dry more slowly.

11.3. What is the Pigment Binder?

Our new Pigment Binder, Ref. 73.190 is used in model painting to slow down drying time and facilitate blending of colors. This is very useful in all weathering techniques, since the slow drying of this medium permits the painter to move the pigments into the desired place more easily. See also 8.3.

11.4. How does Glaze Medium –ref. 70.450- work?

By mixing Glaze Medium with a color, the color will dry more slowly, become more transparent, and settle more easily into the folds and creases of the figure; layering and blending and color transition is made easier. The proportions of the mix depend on the effect desired, but should not be in excess of 50%.

11.5. How can I speed up drying time of Model Color?

If this is necessary, apply dry heat by using a hair dryer - at low temperature and at some distance so as not to disturb the paint film with a direct application of the force of the air.

11.6. How can I slow down drying time?

The Vallejo Drying Retarder, Ref.70.597 slows down the drying of the colors, but should be used sparingly, at not more than 5% of total volume. Our Model Color Thinner, Ref. 70.524, will also slow down drying to some extent. These products will not alter the basic composition of the colors. The addition of water (preferably distilled water) will also slow down drying, but will weaken the adhesive quality of the paint.

11.7. I use the Model Color Drying Retarder, Ref. 70.597. Do you have this product in the Model Air Line?

The chemical composition of this product is the same in all our color ranges, including Model Air, and we are now unifying the labels so that these Auxiliary products are not duplicated. (See also 10.1.)

11.8. How do I use the Drying Retarder? The consistency seems very thick? More like a gel?

Yes, the Retarder (Ref. 70.597) is somewhat like a gel. It should be mixed with the color, a few drops and not more than 5% of the total amount of paint. It can also be applied very sparingly to the surface to be painted; this will extend the drying time of the color to be applied.

11.9. Why should I use the Thinner rather than water to dilute Model Color or Game Color?

The Model Color Thinner (Ref. 70.524) contains ingredients, including acrylic resin, which will not weaken the adhesion and composition of the colors.

11.10. Is there a difference between the Thinner in Vallejo Model Color, Ref. 70.524 and Vallejo Model Air, Ref. 71.061?

Yes, there are important differences in these two products. The Model Color Thinner (Ref. 70.524) is transparent but has the same consistency and formulation as Model color; it is intended to be used with a brush. The new formula Airbrush Thinner (Ref. 71.061) is intended for use in an Airbrush, it contains ingredients which can be safely airbrushed but may damage the paint coating if applied with a brush: the movement of the brush causes friction which, combined with the Airbrush Thinner, may damage recently applied paint.

11.11. How much Airbrush Thinner should I add to Model Air?

It depends on the size of the nozzle, but Thinner should not be added in excess of 25/30%.

11.12. What is Plastic Putty?

Plastic Putty – Ref. 70.400 and 70.401, is a filler, made to correct small irregularities in the model before painting. It is a water-based product, and dries to a stone hard finish which can be sanded lightly and painted.

11.13. How do I remove the paint from a model?

Paint applied recently may be removed with alcohol although many modelers prefer to use our Airbrush Cleaner (71.099 & 71.199) because this product contains lubricants which result in a smoother removal of dried paint than straight alcohol. However, if the paint has thoroughly dried, you may need to use industrial paint remover even though it may damage the surface of the model. Best try gentle scrubbing with Alcohol and/or Airbrush Cleaner first.

11.14. What is Crackle Medium used for?

Crackle Medium (Ref. 70.598) can be used to depict chipped paint on models or to create cracked earth or peeling exterior paint on buildings in dioramas. It is applied between two coats of water-based acrylic paint, see 11.16.

11.15. How do I apply Crackle Medium?

The transparent Crackle Medium works between two acrylic colors. It is applied to the surface of the base acrylic color; when the Medium has dried to a slightly tacky film - depending on humidity in the air, perhaps after 30 minutes - the second, top color is applied; when this color dries, cracks will appear and the bottom color will show through the cracks. If you want to crackle an already existing surface, apply our transparent Matt Medium (Ref. 70.540) as a base coat; when this has dried, apply Crackle Medium and finally the top color.

11.16. What is the difference between the new Chipping Medium and the Crackle Medium?

Our new Chipping Medium has been formulated especially to create flaked and chipped paint on very specific areas of the model, spots where complete control is required, whereas Crackle Medium is used primarily in dioramas, to create cracked and peeled paint on ruined buildings and for effects of dried and cracked earth in desert landscapes.

11.17. How do I use your new Chipping Medium, Ref. 76.550?

The transparent Chipping Medium is applied to the base color of the model, on those areas where flaked and chipped paint is to be created. When the Medium is dry to the touch, the final color is applied with brush or airbrush, and once dry, the area where paint will be chipped is moistened slightly with water: paint flakes are chipped off with a dry brush or stick. Let the area dry again, and apply a final varnish to protect the result.

11.18. How long before the Chipping Medium takes effect?

The Medium works by slowing down the drying of the final color, and this varies according to how the final coat has been applied and on local conditions of humidity in the air. Colors applied with an airbrush dry very quickly, for instance. At any rate, the final color should be dry to touch before starting the flaking process (see 11.17).

11.19. Does the new Chipping Medium contain solvents?

No, the product is water-based, and paint brushes and airbrush can be cleaned with water.

11.20. How does your Decal Medium -73.212 - work?

Vallejo Decal Medium (73.212) prepares the surface of the model and will increase the adherence of the decal. The Medium is applied where the decal will be placed, and used instead of water to moisten the Decal so that it adapts itself to the surface irregularities of the model.

11.21 How do I use Decal Fix , Ref. 73.213?

Once the Decal has been placed on the model and has dried, it is secured with Decal Fix. The product is applied with a soft brush, and needs a few hours to dry completely. As a final step, apply Matt Varnish (70.510) to the model, this will seal and protect the decal.

12/ Premium Color

**12.1. Is Premium Color only intended to be used with an airbrush?**

No, these colors have been formulated for use with an airbrush, but they product is equally suitable for brush techniques and has many uses in fine and decorative arts.

12.2. What is the difference between Model Air and Premium Color?

Model Air has been especially formulated with a 100% acrylic resin for airbrushing models and miniatures, which are seldom exposed to exterior conditions. The Premium formula contains an exterior grade, hybrid resin-polyurethane base of extreme strength; the product has been developed especially for use on surfaces which are exposed to impacts and weather, hard working surfaces, like RC cars and planes, surfboards, helmets and bicycles, but the product can be used on all surfaces. Premium is presented in 60 and 200ml. bottles, sizes which are suitable for working on large areas.

12.3. Will Premium adhere to fiberglass?

Yes, the colors have been especially formulated for superior adhesion to metals, slot cars and RC bodies, including fiberglass, Lexan and all tuning and automotive applications, and resist the fuels employed in RC up to 35% Nitro.

12.4. What nozzle size do you recommend for Premium?

A nozzle size of 0.3 is recommended. For the metallic colors some dilution may be necessary, and for smaller nozzles (0.2mm or less) it may be necessary to employ the Reducer (62.066) for easier flow.

12.5 What pressure should I use in the compressor for Premium?

We recommend a PSI of 30-60psi (2-4 Bar).

12.6. If I want to use the Premium Reducer, what proportion do you recommend?

We recommend a ratio of 1:3.

12.7. Should I use a Primer before applying Premium Color?

The use of a primer is always recommended. The chemical composition of the material used for the models varies, and to ensure perfect adhesion, it is best to use a primer first. The primer prepares the surface and improves the adherence of the paint film. Please see some information about primers under that heading, 7. Primers.

12.8. With Premium, how many coats of paint will I have to apply?

Some colors cover more than others, but usually between two to three coats of Premium will be applied.

12.9. Which Varnish should I use?

The range of Premium includes a clear urethane varnish for final protection. Two coats of varnish are recommended, with 5-10 minutes between coats. For more resistance, allow surface to dry for 24 hours, and once thoroughly dry, sand lightly to support two further coats of varnish for best results.

12.10. I want to have a satin finish, can I add some of the varnish to Premium to obtain this?

Yes, you can add a few drops of varnish right into the cup of the airbrush.

12.11. Do I need to wear a mask when I use the product?

Premium contains no harmful pigments, but wearing a mask when airbrushing is always necessary. Anything foreign in the air we breathe, be it dust or pollen, is best not inhaled, and paint particles, even if not toxic, are still foreign matter. See also point 15. Health and Safety.

12.12. Should I use alcohol to clean the airbrush?

Alcohol will work, but we recommend the Premium Airbrush Cleaner (Ref. 62.067) which contains ingredients to clean, lubricate and protect the airbrush mechanism. Pour the cleaner right into the cup, raise the compressor pressure slightly and spray on tissue paper until the mixture comes out clean.

13/ Color names & equivalencies

**13.1. The Model Color 70.826 (German Camouflage) is not the right shade. In your printed color charts it shows as a red brown, which is right for German vehicles, but in fact this color is more like an amber shade without a red tonality.**

In commercial printing, it is not always possible to achieve the correct tone. For exact color - matching, it is best to look for the equivalent in the official Federal Standard and RAL tables. You can also download more information under "Equivalencies" on our web site.

13.2. Model Color 70.894 is shown on your color chart as 'Russian Green' but on the bottle it is shown as "Cam. Olive Green", is this a mistake?

This reference was one of the first colors we manufactured for models and miniatures, now some 17 years ago, and at that time our advisers suggested this shade as "Russian Green". It is indeed a match for some of the Russian tanks in WWII. As we progressed to manufacture an ever widening range of colors, following the advice of experts, and matching RAL, Federal Standard and RLM, we found that this particular green 70.894 was also a perfect match for RLM 80, Olive Green. The RLM match is the most specific, and it seemed correct to change the name accordingly.

13.3. You have a color in Model Air called German Grey (71.052), but it is not the same color as Model Color 70.995, also called German Grey, which is much darker. Is this a mistake?

When there is data using a known color system, such as RAL or RLM, this is fairly easy, but in some cases, and especially with the green and grey colors in all their variations and shades there is a great variety of opinions and different documentations. But we have added the description "Dark" to Ref. 70.995 in our last printing.

13.4. I want to try the Model Air range of paints, but want to match Citadel's Shadow Grey, can you help?

Please check the Vallejo Website under "Equivalencies", a leaflet which can be downloaded for quick reference. You will probably find a match there, although the best way to match a color is using the corresponding Federal Standard or RAL color number if available.

13.5. Why don't all your colors have Federal Standard, RLM or RAL equivalencies?

The variations of color are infinite, and although these official color systems catalogue over a thousand colors, they are limited to the colors registered by the US and German (and European Community) Governments for official contracts and purchasing orders. There are many other color systems (British Standard 4800, for example), but still they do not contain all the existing variations in camouflage and armor worldwide, let alone basic color variations. Even so the FS and RAL systems are most useful for finding quick equivalencies (The RLM system ceased to exist in 1945).

13.6. I have checked in your Equivalency leaflet the Federal Standard number for Model Air 71.078, and you give FS 23655 instead of FS 33655, is this a misprint?

This is an error, the number should indeed be FS 33655. We have again revised our new Equivalency leaflet (4th edition). Some errors and omissions will be present in the old color - charts in circulation, and surely further corrections will be made in the future. Still, as of 30 March 2012, at least the Equivalencies on our web site are up to date, please see this for the most correct updated information: http://www.acrylicosvallejo.com/en_US/downloads

14/ Vallejo Brushes**14.1. I have just started this hobby, what kind of brushes should I use?**

We have a new Starter Set (Ref. P15.999) which offers 2 round brushes (sizes 3 and 0) and a flat brush for dry-brushing. These Starter Set brushes, selected by experts for quality, size and price, are made of first quality Toray, and offer excellent value.

14.2. Are the Toray brushes in your Starter Set the same quality as your Toray series P510 and P515?

The new Starter Set is made of first grade Toray, but we think that the Toray brushes in our 510 and 515 Series is unequalled in any other line, they are the very best available, and stocked in all sizes, from 10 zeros for the most minute detail, to a large size 7 for a quick basecoat application.

14.3. What is the difference between your Toray Brushes P510 and P515?

The hair employed for these two references is the same, but the brushes in Series 515 have a triangular handle which tires the hand less and allows for more precision.

14.4. Why should I use a sable brush?

Toray - synthetic hair - makes for a fine, all round brush, but nothing will equal the precision and capacity to hold the paint which you obtain with a natural sable hair brush. Especially for working on fine details, sable is incomparable.

14.5. What is the RK 25 brush I hear about?

The RK 25 brush is called the best brush in the world. It is made with Kolinsky Tajmir Sable hairs, a type of sable hair especially selected for its strength and shape holding properties. The quality of the hairs used for these brushes, and the extraordinary care and precision in their manufacture result in a product of an excellence noticed immediately by everyone who uses the RK 25.

15/ Health and Safety**15.1. How safe are your colors?**

All our colors are water-based, they do not contain toxic solvents. All our colors have obtained the ASTM D-4236 (USA) and the EN-71 (Europe) certifications, and all our raw materials comply with the REACH requirements. See also 15.6 to 15.9 below.

15.2. Who certifies that no health labeling is required?

This is a certification required by USA authorities. Formulas are submitted to a U.S.A. laboratory, which then issues the "No Health Labeling Required" ASTM D-4236 certification. This is a continuing process as new formulations arise. For more information please see www.astm.org, and below 15.8. What is ASTM-D-4236.

15.3. What is the meaning of the Model Color label inscription: Does not Contain As, Cd, Co, Cr, Hg, Pb, Sb and Se?

These are the international symbols for chemicals which are known toxic agents. Please also see our webpage www.acrylicosvallejo.com for more information about Health and Safety.

15.4. If Model Color paints are water-based and do not contain toxic solvents, why are some colors labeled: Do not Spray?

Some of our colors contain a small percentage of Cadmium pigment, and are so identified on the label by the phrase "Do not Spray" or by the Pictogram below. A complete listing can be found on our web site under "Health and Safety". The pigment Cadmium is considered harmful only when dispersed in the air, and California proposition 65 requires the label to carry the warning "Do not spray".

15.5. Is Game Color safe for use by children?

Yes, it is. The use of Game Color for painting the figures used in tabletop games has been the principal factor considered in its formulation. Beside the ASTM certification, Game Color has obtained the EN 71/3 certificate, which means that it can be used safely by children, although it is not to be sold as a toy. The complete certification reads: Conforms to EN 71: 1994/3 "Safety of Toys Part 3, "Migration of Certain Elements", which permits the colors to be used by children over the age of 3 years. Game Color is not intended for use in Airbrushing, and some of the colors carry the "Do not Spray" advice.

15.6. What does the CE on your labels stand for?

The CE stands for Conformité Européenne, which translates as "European Conformity", a phrase established by the European Community which signifies that a product complies with the legal and technical standards established by the EEC, in accordance with directive 93/68/EEC.

15.7. What is ASTM D-4236?

ASTM D4236 Standard Practice for Labeling Art Materials for Chronic Health Hazards describes the standard procedure for developing precautionary labels for art materials to provide chronic health hazard and precautionary statements based on knowledge that exists in the scientific and medical communities.

These statements concern hazards known to be associated with a product or product component(s) when it is present in a physical form, volume, or concentration that in the opinion of a toxicologist has the potential to produce a chronic adverse health effect.

This practice applies exclusively to art materials packaged in sizes intended for individual users of any age or those participating in a small group, and does not apply to products appropriately labeled for known chronic health hazards. Also, this practice does not specify test methods for determining whether a substance or product presents adverse chronic health effects.

Labels should include the signal word WARNING, list of potentially chronic hazards, name of chronically hazardous component(s), safe handling instructions, list of sensitizing components, information sources, labeling content and product size, and other supplementary information.

15.8. What are REACH requirements?

R.E.A.CH is a new European Community Regulation on chemicals and their safe use. It deals with the Registration, Evaluation, Authorization and Restriction of Chemical substances. The new law entered into force on 1 June 2007.

The aim of REACH is to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. One of the main reasons for developing and adopting the REACH Regulation was that a large number of substances have been manufactured and placed on the market in Europe for many years, sometimes in very high amounts, and yet there is insufficient information on the hazards that they pose to human health and the environment. There is a need to fill these information gaps to ensure that industry is able to assess hazards and risks of the substances, and to identify and implement the risk management measures to protect humans and the environment.

The registration of these substances only concern the manufacturers and importers of chemicals and not the intermediate users. The paint manufacturers are considered intermediate users of chemicals. Reach's obligations for intermediate users are: The paint will be manufactured only with registered or authorized substances, and information about the use of the raw materials employed should be available.

15.09. How does a manufacturer obtain these certifications?

The product formulations are presented to independent certified laboratories, who then issue the corresponding safety certificates. This procedure has to be renewed every five years, to ascertain that all new developments in this area are correctly applied.

15.10. Some paints and varnishes carry an black cross on an orange background. What does this mean?

This is the Cross of St. Andrew, and implies that the product may be irritating. By 2015 new regulations will substitute this warning with a total of 8 pictograms, the most important of which will show flammability, toxicity and contamination dangers, so that manufacturers worldwide will be obliged to be more precise in their labeling. In the case of our products, during the year 2011 we have reformulated the few products which carried this signal, and in some cases the cross has now been replaced by an "Exclamation Point", since the percentage of polyurethane is now below the limit of "irritating".

15.11. The Cross of St. Andrew is on your Acrylic-Polyurethane Primers. What does this imply?

This implies that the product may be irritating, but our new primers are now manufactured with a hybrid acrylic- polyurethane resin with a very low percentage of polyurethane, so that it is sufficient that they carry only the "Exclamation Point" instead of the St. Andrews Cross on the label.

15.12. Why have you not applied this warning to the label of Premium Color, which contains Polyurethane resin?

The percentage of polyurethane resin in these colors is below the level which needs the St. Andrew Cross or any other kind of warning.

Imágenes cedidas por:

Pictures courtesy by:

Latorre Models, José Brito, Chema Cabrero, Avatars of War



Made in Spain



Todos los colores en nuestro catálogo están conformes con las normas ASTM D-4236 (American Society for Testing and Materials) y con la normativa Europea 67/548/ CEE,

All colors in our catalogue conform to ASTM D-4236 standards and EEC regulation 67/548/CEE, and do not require health labelling.



vallejo

ACRYLICOS VALLEJO, S.L.

Eusebio Millán, 14-16 / 08800 Vilanova i la Geltrú, Barcelona (España)

Tel. +34 93 893 60 12 Fax +34 93 893 11 54

E-mail: vallejo@acrylicosvallejo.com

www.acrylicosvallejo.com

Follow us on

