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PRODUCT INFORMATION SHEET

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OPTICAL FX COLOUR

Description

HiChem Optical FX is a high quality special effect paint system that gives spectacular colour changes when viewed from different angles.

Optical FX is a 3-coat system.

- *Background Coat* must be used under all areas where *Optical FX Colour Coat* is applied. Ensures the full colour intensity and special effect is obtained.
- *Colour Coat* contains the pigment that gives the spectacular colour changes when viewed from different angles.
- *A suitable clear coat* is applied to enhance the colour effect, improve gloss and provide a more durable surface.

Uses

Automobile respray – especially for high quality show cars, Hot Rods etc.

Marine –boats, accessories, and trailers.

Architectural- furniture, glass splashbacks, signage

For decoration of household items, sport and recreation items, automotive trim and accessories, displays, models, art and craft work.

This system is ideally suited for decorating telephones, mobile telephones, bicycles, skateboards, wheel trims, vases, statues, lamps, art, craft and projects of all types, on virtually any surface (See Suitable Substrates below) after suitable preparation.

Properties

HiChem Optical FX demonstrates the following outstanding characteristics:-

- Spectacular colour changes
- For Acrylic, Iso-Free and 2 Pack paint systems.
- Excellent adhesion to a variety of substrates
- Excellent colour retention

Suitable Substrates

HiChem Optical FX system may be applied over the following substrates:-

- **Painted surfaces** (in sound condition) including Acrylic Lacquer, 2 Pack Acrylic Urethane. Sand all surfaces to be painted with P600-800 grit paper. Clean with *Prepwash*. Some painted surfaces such as enamels may be sensitive to *Optical FX*. If in doubt test on an inconspicuous area. *HiChem Isolator or Stain Stop or 2 Pack Iso-Free Primer-Isolator* may be used to seal sensitive areas.
- **Plastics** including ABS, Polycarbonate, Acrylic, Bakelite. Polypropylene should be primed with *Motospray Flexiprime* to ensure good adhesion. For other plastics the applicator should perform testing to confirm that it is suitable for the job. Otherwise consult HiChem. Not suitable for High Density Polyethylene.
- **Fibreglass**- If required use the appropriate sandable primer to smooth out imperfections. Sand fibreglass with P400 paper and primer with P600-800 grit paper. Clean with *Prepwash*
- **Bare metal** including, Steel, Stainless Steel, Zinc Anneal, chrome, brass, copper. Scuff with medium to coarse abrasive pad then clean surface with *Prepwash Wax & Grease Remover*. If required use the appropriate sandable primer to smooth out imperfections; sand with 600-800 grit paper then clean with *Prepwash*.
- **Aluminium**-Abrade surface with coarse abrasive pad then clean surface with *Prepwash Wax & Grease Remover*. Where polished aluminium is supplied with a protective plastic wrap adhered to the surface, clean thoroughly with *Superglow Multipurpose Thinner* before abrading.
- **Wood** including MDF, Craftwood, particle board, chipboard, hardboard and timber after appropriate surface preparation. Not recommended for use on open grained timbers. *HiChem Iso-Free Primer/Isolator, Stain Stop* may be used as a sandable primer/sealer to smooth out imperfections or as a isolator/sealer over pre coated surfaces.
- **Ceramic** (unglazed). If required use *HiChem Isolator or Stain Stop* as a sandable primer to smooth out imperfections.

Surface Preparation

The surface to be painted must be smooth, sound and clean. Perform any repair work. Prime repaired areas with a primer appropriate to the clear coat to be used. Sand all painted surfaces to be painted with P600-800 grit paper. Surface should finally be cleaned with *Prepwash* wax and grease remover.

Refer to HiChem for specific advice on unusual surfaces.

Note: This is a special effect paint. Effects may vary depending on the shape and texture of the object to be painted, spraying conditions and skill of the painter. Best effects are achieved on smooth surfaces. Avoid spraying in conditions of extreme (high or low) temperature and humidity. Spray in still conditions - avoid wind and draughts. Application of very even coats of *Colour Coat* will give best effect.

Application and Thinning

Application of Background and Colour Coats may be carried out using Gravity feed or Suction feed spray guns. Recommended setup-

Gravity feed: Fluid tip 1.4-1.6 mm. Atomising pressure 60psi/420kPa.

Suction feed: Fluid Tip 1.5-1.7 mm. Atomising pressure 60psi/420kPa.

Acrylic System

Preparation: Use acrylic primers and putties if required.

Optical FX Background Coat: To be used if applying to unprimed substrates. Thin with *Superglow* at 20-30% by volume. Then apply approx. 2-3 coats allowing 10-15 minutes flash off between coats at 20 °C. Allow to dry for 1 hour at 20 °C before applying Colour Coat.

Note: If substrate has been previously primed and is still in a stable condition then the *FX Background Coat* should be replaced by *Motospray Jet Black Acrylic*. Thin at rate of 1 part by volume of *Jet Black* to 1.5 parts of *Superglow Multipurpose Thinner*.

Spray light even coats until complete opacity is achieved. Allow a flash off time between coats of approximately 10-15 mins at 20°C.

Allow flash off time of approx 20-30 mins at 20°C before application of *FX Colour*.

Optical FX Colour: Thin at a rate of 1 part by volume of *Optical FX Colour* to 0.8 parts by volume of *Superglow*. Then apply as many coats as required to achieve desired effect (approx. 3-5 coats). Allow 10-15 minutes between coats at 20°C. Allow to dry for approx. 15 minutes at 20°C before applying *Acrylic Top Coat Clear*.

Top Coat Clear: Thin with *Superglow* at rate of 1 part by volume of *Clear* to 1.5 parts *Superglow*. Then apply 2-3 coats allowing 10-15 minutes flash off between coats at 20°C. Allow to dry minimum of 6 hours at 20°C before cutting and polishing (if required) but preferably overnight.

Refer to *Top Coat Clear* Product Information Sheet for more detail).

Iso-Free 2 Pack Acrylic System

Preparation: Use *Iso-Free Primer / Isolator* if required.

Optical FX Background Coat: To be used if applying to unprimed substrates. Thin with *Superglow* at 20-30% by volume. Then apply approx. 2-3 coats allowing 10-15 minutes flash off between coats at 20 °C. Allow to dry for 1 hour at 20 °C before applying Colour Coat.

Note: If substrate has been previously primed and is still in a stable condition then the *FX Background Coat* should be replaced by *Motospray Jet Black Acrylic*. Thin at rate of 1 part by volume of *Jet Black* to 1.5 parts of *Superglow Multipurpose Thinner*.

Spray light even coats until complete opacity is achieved. Allow a flash off time between coats of approximately 10-15 mins at 20°C.

Allow flash off time of approx 20-30 mins at 20°C before application of *FX Colour*.

Optical FX Colour: Thin at a rate of 1 part by volume of *Optical FX Colour* to 0.8 parts by volume of *Superglow*. Then apply as many coats as required to achieve desired effect (approx. 3-5 coats). Allow 10-15 minutes between coats at 20°C. Allow to dry for approx. 15 minutes at 20°C before applying *Iso-Free 2 Pack Clear*.

Iso-Free Clear:

Mix 3 parts by volume of 2 Pack *Iso-Free Clear* with 1 part by volume of 2 Pack *Hardener 31* (Normal or Slow). If required add 5 to 10% thinner 701N or 701S to the total mixed material.

Apply 2 or 3 single wet coats allowing a flash-off time of 10-15 minutes between coats.

Use a spray gun with a nozzle size of 1.8 – 2.0 mm.

Excessive film builds may give rise to yellowing

Drying Time:

Air dry: Tack free in 30 minutes at 20°C and ready for assembly in 24 hours.

Low Bake: A 15 minute flash-off time is required before force drying for 60 minutes at 60° C metal temperature. (Do not bake if applied over acrylic lacquer- air dry only)

Infra-red: Medium wave 17KW. Flash off for 10 minutes. Expose for 35 minutes on medium power at a distance of 40-60 cm. . (Do not Infra Red if applied over acrylic- air dry only)

N.B. Choose Hardeners and Thinners according to size of object and/or temperature prevailing at the time.

Drying time will vary accordingly. For example : If the temperature is above 25°C and large flat areas are to be painted use *Iso-Free Hardener 31* (Slow) and *Thinner T701S* (Slow). For full vehicle respray a combination of *Slow Hardener* and *Slow Thinner* is recommended.

Full cure, under ambient conditions, is achieved in 7 days.

HiChem 2 Pack System

Preparation: Use the appropriate 2 Pack Primers and fillers.

Optical FX Background Coat: To be used if applying to unprimed substrates. Thin with *2 Pack Thinner Normal* at 20-30% by volume. Then apply approx. 2-3 coats allowing 10-15 minutes flash off between coats at 20 °C. Allow to dry for 1 hour at 20 °C before applying Colour Coat.

Note : If substrate has been previously primed and is still in a stable condition the the FX Background Coat should be replaced by HiChem Basecoat Tinter BC209. Thin at rate of 1 part by volume of BC209 to 0.8 parts of *2 Pack Thinner Normal*.

Spray light even coats until complete opacity is achieved.

Allow a flash off time between coats of approximately 10-15 mins at 20°C.

Apply to a total of 15-20 microns dry film thickness.

Allow flash off time of approx 10-15 mins at 20°C before application of FX Colour.

Optical FX Colour: Thin at a rate of 1 part by volume of *Optical FX Colour* to 0.8 parts by volume of *2 Pack Thinner Normal*

Then apply as many coats (approx. 3-5) as required to achieve the desired effect. Allow a flash off time between coats of approximately 10-15 mins at 20°C.

Allow to dry for 15 minutes at 20°C before application of *2 Pack Super Clear*, *2 Pack Platinum MS Clear* or *2 Pack Express Clear*.

2 Pack Super Clear

Mix 2 parts by volume of 2 Pack Super Clearcoat with 1 part of volume 2 Pack Hardener (Fast or Medium).

Add 10 to 20 per cent by volume of Thinner (Fast 2PTF, Normal 2PTN or Slow 2PTS)

Apply 2 or 3 single wet coats allowing a flash-off time of 10-15 minutes between coats.

Drying Time:

Low Bake: A 15 minute flash-off time is required before force drying for 30-45 minutes at 60° C metal temperature.

Infra-red: Flash-off for 15 minutes then 10-20 minutes IR exposure.

For application details for *2 Pack Platinum MS Clear* refer to the Product Information Sheet.

For air dry applications use *Hichem Express Clearcoat*. Refer to the Product Information Sheet.

N.B. Choose Hardeners and Thinners according to temperature and size of object to be painted. Drying time will vary accordingly.

Full cure takes approx. 7 days. For rework before full cure, apply 2 Pack Iso-Free Primer / Isolator.

Coverage Approximately 5m²/litre.

Clean up Clean all equipment with *Superglow multipurpose thinner*.

Storage Store in a cool dry place. Always replace lid securely after use.

Health & Safety Flammable. Avoid contact with skin and eyes. Wear overalls, gloves and goggles. Avoid breathing vapour or spray mist. Ensure adequate ventilation during use. See the Material Safety Data Sheet for full details.

Standard Packaging

| <u>Product</u> | <u>Size</u> | <u>Product Code</u> |
|-----------------------------------|-------------|---------------------|
| <i>Optical FX Background Coat</i> | 1 | FXBC1 |
| | 500 | FXBC500 |
| <i>Optical FX Colour Coat</i> | | |
| Electric Plum | 1 | FXKEP1 |
| | 500 | FXKEP500 |
| Sunset Blaze | 1 | FXXSB1 |
| | 500 | FXXSB500 |
| Jaded Passion | 1 | FXXJP1 |
| | 500 | FXXJP500 |

The information contained in this bulletin is presented in good faith based on thorough laboratory and field-testing but without warranty. As we have no control over the conditions under which these products are used, it is recommended that all products be tested by the end user to ensure the suitability of the product for the particular application and conditions.