Preface

It is a difficult task giving precise instructions on the execution of new paint-and/or varnish work and the maintenance of existing paint- and/or varnish work. Many new and different materials are being used in the construction of new vessels and in case of existing vessels, the condition of the old paint/varnishwork may vary, therefore, we can only provide general guidelines. This brochure will direct you in the choice of product, system and application.

GENERAL TIPS

The final result of the paintwork is strongly influenced by the condition and preparation of the existing surface and the conditions under which the products are being used.

Cleaning/degreasing

Prior to sanding, ensure that the surface is clean and well degreased. On existing paint- or varnish layers water soluble dirt may be removed with water and ammonia. After drying, degrease with EPIFANES Spraythinner for Paint & Varnish. Never use water or products containing water on bare (tropical) wood as these may activate substances in the wood fibres. Bare (tropical) wood requires thorough degreasing with EPIFANES Spraythinner for Paint & Varnish or denaturated alcohol. Allow sufficient time for the thinner to evaporate and the surface to dry.

Sanding

Thorough sanding is required to ensure optimum adhesion between coats and to create a smooth undercoat. Unless instructed differently, sand every coat of finish before applying a new coat. Each surface requires a particular type and grit of sandpaper. Bare surfaces, primers, undercoats and fillers need to be dry sanded in order to avoid the intake of moisture. Sanding between topcoats can best be executed with a fine grit sandpaper and water. One should avoid visible sanding scratches in the topcoat. Sand between finishing coats of varnish along with the grain, preferably by hand. It is not advised to sand mechanically in combination with rough sandpaper as this causes rough sandmarks. Also too much filmthickness is being sanded down and consequently sufficient system build-up will not be achieved. When (dry) sanding, we recommend to wear an appropriate duskmask to avoid breathing fine dust particals. When sanding products containing lead or chromate, it is imperative that one wears an ap-

propriate breathing apparatus. The recommended type of sandpaper and grit are determined in each system.

Personal safety

Make sure that the application and drying of paint surfaces is performed in well ventilated places and obey all safety precautions. Avoid contact with skin and eyes. When ventilation is limited, wear an appropriate breathing apparatus in order to avoid breathing solvent fumes.

Tools

Use only appropriate, clean and dry tools. For optimum result use clean, longhaired, soft bristle brushes of good quality. Preferably EPIFANES brushes. When applying two-component products by roller, use only paint rollers that are resistant to the (aggressive) solvents in these paints, like nylon or sheepskin. For the roller application of one-component paints foam or perlon rollers may be used.

Working area

Only work in dry, draft free and dust free surroundings. Do not paint in direct sunlight or under humid conditions. Be aware of condensation after the application of paint. Moisture can settle into the wet film, causing the paint to lose its gloss. In particular two-component paints are susceptible to this problem.

Temperature/relative air humidity

When applying one-component products, the minimum processing and object temperature should be no less than 5° C. (= 40° F). Two-component products should not be applied under $10\text{-}12^{\circ}$ C. (= $50\text{-}55^{\circ}$ F). During application, the relative air humidity should not exceed 85° %. When applying two-component products a maximum air humidity of 70° 8 should be observed. Application of paint/varnish in conditions above these levels may have repercussions on the drying and hardening qualities of the product. The minimum temperature of the object to be painted should be 3° C. (= 5° F.) above the point of condensation. Before painting, ensure that the surface is dry. When painting overhead on cold(-er) days, beware of condensation from your breath on the cold surface.

Film thickness/thinning

Avoid applying too heavy a film thickness causing through-drying problems and wrinkling. It is always better to apply two thin coats than one thick coat.

Distribute the paint well and even. Do not thin more than necessary. Too much thinning causes sacks and too thin a dry filmthickness. A thin coating provides only limited protection which can lead to a rapid loss of gloss. Too little thinning however, may influence the flow. Only use the recommended thinners indicated on the can. The thinning percentage depends on the temperature of the paint and environment. The indicated thinning ratios are general guidelines. Avoid the use of other additives as these may disturb the balance of the product.

Stirring

Before painting, ensure that the paint is mixed well to a smooth paint substance. There may be deposits and/or pigments lying beneath the lip or on the sides and bottom of the container. Avoid the intake of air into the paint by stirring too aggressively. In order to avoid possible colour differences always use paints, on the same surface with an identical batch number, found on the bottom of each can. When applying two-component paints, obey the initial reaction time of the mixed product before application.

Maintenance

An important consideration when painting or repainting existing, unknown surfaces, is the choice of the correct product. In general, when a surface has been previously painted there are two possibilities. Either a one-component paint system or a two-component paint system has been applied.

By placing a cloth saturated with EPIFANES Fibreglass Prep Cleaner on the surface for 15 minutes, the difference will become evident. If the Fibreglass Prep Cleaner reacts as a paint remover and begins to wrinkle the paint, it is a one-component paint. If the paint remains intact, you are most definately dealing with a two-component paint product.

In principle a one-component paint may be applied onto a well cleaned and sanded (320 grit wet or dry abrasive paper) one-and two-component paint coat. The bond is acquired mechanically by roughing the surface. A two-component product however, may not be applied over a one-component paint coat, as the solvents of the two-component product will react as a paint remover on the one-component coat.



Wood above the waterline

General surface preparation

Wood is a natural product that will break down with the presence of mould. In high humidity situations, over extended periods of time, moulds develops and will deteriorate the wood. This biological break down (rotting) ideally takes place at a temperature of 25°C. (= 80°F.). The maximum humidity of the wood therefore, must not exceed 13%. Make sure that the wood is dry and degreased. Oily, resinous types of wood, like pine and oregon pine must be well degreased before paint, varnish or stain is applied. Wipe down the wood with EPIFANES Spraythinner for Paint & Varnish or denatured alcohol and allow to evaporate. Sand the bare wood to a fresh surface, with the grain, using 60-80 grit dry abrasive paper. Subsequently, sand with grits from 100 to 220.

Varnish and oil systems

If desired, the best time for colour staining is when the wood is new or bare. Stain preferably with Epifanes Rapidcoat (see page 44) or with a waterbased stain. Do not colour the varnish itself as this may cause blooming. If Epifanes Rapidcoat or a stain has been applied, use a finer grit abrasive paper in order to avoid sanding through the stain leaving undesired patches.

Wood provides a natural beauty. A well applied varnish or oil system will enhance this natural beauty and also protect the wood against atmospheric conditions (i.e. UV-radiation). Wood and wood constructions are flexible by nature. If the wood contains more moisture, the flexibility will increase. Hard two-component paint and varnishes (i.e. Poly-urethane) provide insufficient elasticity to adjust to the movement of the wood.

On wooden surfaces these hard paints and varnishes will eventually form cracks and are therefore, not recommended. Two-component systems are more suited on marine plywood that is dimensionally stable. Traditional one-com-



ponent paint/varnish systems are more elastic and may therefore be applied on both flexible and non-flexible wood and wood constructions.

Varnishing teak and other oily resinous tropical wood is more complicated. For the application of varnishes on exterior teak and iroco, see page 14 and beyond.

In general, areas subjected to heavy traffic or wear and tear (i.e. decks and the edges of hatches) require more repair and maintenance. On these areas two-component systems offer greater scratch resistance, but do wear. Repair and maintenance of these two-component systems is more difficult than traditional one-component systems.

To get a better insight in the main characteristics of the various Epifanes clear finishes, refer to the varnish overview below. This will assist you in choosing the right varnish for the job. For detailed product information, go to the product descriptions on page 43 onwards.

In case of pigmented systems an evenly coloured film is to be obtained. In case of transparent systems, a clear, golden glass-like finish is to be obtained. Such a finish can be achieved by applying a larger number of coats than in the case of pigmented paints, resulting in a thicker dry filmthickness. The first coats of transparent systems are thinned allowing the system to deeper penetrate inside the wood fibre. As a result this will ensure a better bonding for the build-up coats to the wood. After applying the first thinned coat the surface may look rough. This is due to the fact that the wood fibres absorb the thinned product and start to rise. After curing, sand the wood back to a smooth surface using dry abrasive paper 280-320 grit. For description of the one component varnish-like system on teak and iroco, go to page 14.



Varnish overview

Varnish name	Туре	UV resistance	Gloss level	Hardness	Flexibility
Epifanes Clear Gloss Varnish	_	+++++ n gloss trad extra UV fi		+++ nish.	++++
Epifanes Rubbed Effect Varnish	1-Comp Clear satin	+ finish over	+ high gloss k	+++ ouild-up. For	+++ interior use.
Epifanes Aqua Marine		+ clear water or interior		++++ n finish ove	+++ r high gloss
Epifanes Woodfinish Gloss		_	+++++ nish-like fini	+++ sh. Especia	+++++ lly for teak.
Epifanes Woodfinish Matte		++ n finish ove interior use		+++ ish gloss.	+++
Epifanes Rapidclear	1-Comp Quick and Contains U	l easy semi	+++ -gloss varn	++++ ish- alternat	++++ ive.
Epifanes Rapidcoat	Slighted ti	++++ nted quick e. Contains	•	++++ emi-gloss vo	++++ arnish-
Epifanes Poly-urethane Clear Gloss		+++++ sistant clea JV filtre.	+++++ r high glos	+++++ s varnish.	++
Epifanes Poly-urethane Clear Satin	Clear satir	++ finish over		+++++ onent high g	++ loss build-up
Epifanes PP Varnish Extra	Hard high	+++ gloss build . Contains		++++ n. Excellent	+++ filling
Epifanes Teak-O-Bello	Especially	++++ for teak de ffect caulkin		n.a. nts weather	++++ ing.

One-component UV-resistant clear varnish system (Epifanes Clear Gloss Varnish) After surface preparation

steps	Product	Number of coats	ļ ·	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Clear Varnish	1	Brushthinner for 50 Paint & Varnish	24 hours	220 dry	In order to minimize sinking of subsequent varnish coats, drysand wetfilm with 220 grit wetordry abrasive paper, allow to dry and subsequently scrape clean.	Page 43
2	EPIFANES Clear Varnish	1	Brushthinner for 25 Paint & Varnish	24 hours	220 dry		
3	EPIFANES Clear Varnish	1	Brushthinner for 15 Paint & Varnish	24 hours	280 dry		
4	EPIFANES Clear Varnish	4	Brushthinner for 0-5 Paint & Varnish	24 hours	400 wet or finer	A minimum of4 build-up coats is required. In warmer climates with high UV-levels, a minimum of 6 build-up coats is required for sufficient protection	

What to do on an existing one-component varnish system and maintenance

If the existing coats of varnish are intact and only loss of gloss is noticed, one or more coats may be applied on a well cleaned, degreased and lightly sanded surface. In general varnish systems are liable to UV-radiation. Allthough EPIFANES Clear Varnish contains an excellent UV-inhibitor, it is necessary to anually apply one or more maintenance coats depending on the condition of the system. In warmer climates with high UV-levels the interval between maintenance coats will be reduced. After cleaning, degreasing and sanding, EPIFANES Clear Varnish may also be applied on practically any brand of one-and two-component varnishes.

An existing varnish system in poor condition must be removed. Weathered spots may be treated with a cleaning or bleaching product. If either are used, wash the surface thoroughly with fresh water in order to remove any residue. Allow the surface to dry. On large surfaces a new varnish system should be applied. Smaller spots needing repair may be filled with several coats of varnish. When an equal level has been achieved, sand to a smooth surface

and apply one or more coats of varnish on the entire surface. If desired, the final two coats EPIFANES Poly-urethane Clear Gloss may be replaced by two or more coats EPIFANES Clear Varnish (one-component). For optimum

Quick and easy alternative to a one-component clear varnish system (Epifanes Rapidclear) After surface preparation

steps			Epifanes Thinner	Thinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Rapidclear	4-5	Do not thin	_	5-6 hours	Do not sand	Stir well prior to use. If topcoated with varnish, sand final coat with 220 grit abrasive paper	Page 44

Two-component UV-resistant clear varnish system (Epifanes Poly-urethane Clear Gloss) After surface preparation

steps	Product	Number of coats	•	· • I	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Poly-urethane Clear Gloss	1	Poly-urethane 10 Brushthinner	0-15	24 hours		In order to minimize sinking of sub- sequent varnish coats, drysand wet- film with 220 grit wetordry abrasive paper and subsequently scrape clean.	Page 45
2	EPIFANES Poly-urethane Clear Gloss	1	Poly-urethane 10 Brushthinner	0-15	24 hours	280 dry	Apply 2nd. coat within 48 hours after 1st. coat.	
3	EPIFANES Poly-urethane Clear Gloss	2	Poly-urethane (Brushthinner	0-10	24 hours		Apply 4th coat within 48 hours after 3rd coat. Lightly sand 4th coat with 360 grit wet or dry abrasive paper or finer.	
4	EPIFANES Poly-urethane Clear Gloss	2	Poly-urethane (Brushthinner	0-10	24 hours	360 wet or finer	If 6th coat is applied within 48 hours after 5th, sanding is not required. More coats may be necessary in warmer climates.	

mechanical adhesion between the Poly-urethane and the Clear Varnish, sand the Poly-urethane with 220 grit dry abrasive paper. Alllow 24 hours between the coats EPIFANES Clear Varnish and sand between coats with 400 grit wet or dry abrasive paper or finer. The one-component finish may be preferred if a more elastic topcoat is desired or required. The one-component finish also provides easier maintenance.

What to do on an existing two-component varnish system and maintenance

If the existing coats of the two-component varnish are intact and only loss of gloss is noticed, one or more coats EPIFANES Poly-urethane Clear Gloss may be applied on the well cleaned, degreased and lightly sanded two-component surface. EPIFANES Poly-urethane Clear Gloss may also be applied on practically any existing, well cleaned, degreased and sanded two-component varnish and epoxy system. EPIFANES Poly-urethane Clear Gloss provides the necessary UV-protection on an epoxy system. An existing two-component varnish system in poor condition must be removed. Subsequently a new Poly-urethane varnish system should be applied, as described above.

One-component interior satin varnish system (Epifanes Rubbed Effect Varnish) After surface preparation

steps	Product	Number of coats		Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
]	EPIFANES Clear Varnish	1	Brushthinner for 50 Paint & Varnish	24 hours	220 dry		Page 43
2	EPIFANES Clear Varnish	1	Brushthinner for 25 Paint & Varnish	24 hours	220 dry		
3	EPIFANES Clear Varnish	1	Brushthinner for 15 Paint & Varnish	24 hours	280 dry		
4	EPIFANES Rubbed Effect Varnish	2	Brushthinner for 0-5 Paint & Varnish	12 hours	400 wet or finer	Lightly sand between coats by hand along the wood grain.	Page 43

NEW Waterbased alternative for a interior satin finish (Epifanes Aqua Marine)

Alternatively the coats EPIFANES Rubbed Effect Varnish of the above mentioned system may be replaced by two coats EPIFANES Agua Marine. Epifanes Agua Marine is waterbased, quick drying and scratch resistant providing a beautiful satin sheen. Other characteristics of this newly development interior coating are outstanding flowing ability and excellent resistance against alcohol and other household chemicals. Very low on VOC.

What to do on an existing one-component interior varnish system and maintenance

If the existing system is intact, clean, degrease and sand to a smooth surface using 280 grit or finer dry abrasive paper and apply two coats EPIFANES Rubbed Effect Varnish. See step four of the above system.

Two-component interior satin varnish system (Epifanes Poly-urethane Clear Satin) After surface preparation

steps	Product	Number of coats		Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Poly-urethane Clear Gloss	1	Poly-urethane 10-15 Brushthinner	24 hours			Page 45
2	EPIFANES Poly-urethane Clear Gloss	1	Poly-urethane 10 Brushthinner	24 hours	280 dry	Apply 2nd. coat within 48 hours after 1st. coat.	
3	EPIFANES Poly-urethane Clear Gloss	1	Poly-urethane 0-10 Brushthinner	24 hours	360 wet or finer		
4	EPIFANES Poly-urethane Clear Satin	2	Poly-urethane 0-10 Brushthinner	24 hours or finer	400 wet	Lightly sand between coats by hand along the woodgrain.	Page 46

If the existing system is intact, clean, degrease and sand to a smooth surface using 280 grit or finer dry abrasive paper and apply two coats EPIFANES Poly-urethane Clear Satin. See step four of the above system.

What to do on an existing two-component interior varnish system and maintenance

If desired, the final two coats EPIFANES Poly-urethane Clear Satin may be replaced by at least two coats EPIFANES Rubbed Effect Varnish (one-component). For optimum mechanical adhesion between the Poly-urethane Varnish and the Rubbed Effect Varnish, sand the Poly-urethane Varnish with 220 grit dry abrasive paper.

TROPICAL WOOD, I.E. TEAK AND IROCO

The application of varnishes on exterior teak surfaces has often proven to be inadequate. Wood, especially oily resinous tropical wood, contains substances that may cause problems during and after varnishing, i.e. slow drying, discolouring, blistering and peeling. These problems may be overcome by executing a thorough surface preparation. The (tropical) wood must be well cleaned and degreased beforehand with EPIFANES Spraythinner for Paint & Varnish or denaturated alcohol. Never use water or products containing water as these may activate substances in the wood fibres. Wood contains moisture naturally. When varnishing however, the percentage of moisture in the wood must not exceed 13-14%. Make sure that the wood is dry. A longterm protection of these surfaces may be achieved by processing a twocomponent isolating coat for tropical wood or by processing a vaporous system at which the potential acids and grease may de-aerate through the coating without de-adhering the varnish system. EPIFANES Woodfinish is a high gloss one-component filmbuilding finish with microporosic properties specifically designed for application these on oily and resinous tropical woods. However do not use EPIFANES Woodfinish gloss on bankirai.



One-component UV-resistant vaporous varnish-like system for tropical wood (Epifanes Woodfinish Gloss) After surface preparation

steps	Product		Epifanes Thi Thinner rat	nning io %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Woodfinish Gloss	1	Brushthinner for Paint & Varnish	25	24 hours	280 dry		Page 43
2	EPIFANES Woodfinish Gloss	4-5	Brushthinner for Paint & Varnish	0-5	24 hours	400 wet	If subsequent coat is applied within 72 hours, sanding between coats is not required. After 72 hours lightly sand.	

Note 1: On other wood types, i.e. mahogany, the number of coats and thinning ratios of Epifanes Woodfinish are different. For application, refer to the one-component UV-resistant clear varnish system on page 8.

Note 2: For a satin finish on teak, EPIFANES Woodfinish Gloss may be overcoated with two coats EPIFANES Woodfinish Matte (for interior use)

What to do on an existing one-component varnish-like system on tropical wood and maintenance.

If the system is intact and only loss of gloss is noticed, we advise applying one or two maintenance coats. The weather- and atmospheric conditions to which the finish is subjected will determine the amount of time between maintenance coats. One or two annual coats should be applied obeying the surface preparation. EPIFANES Woodfinish Gloss may also be applied on practically any woodoil or varnish system in good condition. An existing system in poor condition however must be removed. Subsequently a new Woodfinish Gloss system should be applied as described above.

If desired, the coats EPIFANES Poly-urethane Clear Gloss may be replaced by at least three coats EPIFANES Clear Varnish (one-component). For optimum mechanical adhesion between the PP Varnish Extra and the one-component Clear Varnish, sand the PP Varnish Extra with 220 grit dry abrasive paper. Allow 24 hours between the coats EPIFANES Clear Varnish and sand between coats with 400 grit wet or dry abrasive paper or finer. The one-component finish may be preferred if a more elastic topcoat is desired or required. The one-component finish also provides easier maintenance.

Quick and easy one-component alternative UV-resistant system for tropical wood (Epifanes Rapidclear) After surface preparation

steps			Epifanes Thinner	Thinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Rapidclear	4-5	Do not thin	_	5-6 hours	Do not sand	Stir well prior to use. If topcoated with Woodfinish , sand final coat with 220 grit abrasive paper	Page 44

Two-component isolating UV-resistantvarnish system for tropical wood (PP Varnish Extra) After surface preparation

steps	Product	Number of coats	•	Thinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES PP Varnish Extra	1	Thinner for P Varnish Extra		2-3 hours	Sanding not required		Page 46
2	EPIFANES PP Varnish Extra	1	Thinner for P Varnish Extra		2-3 hours	Sanding not required	If sanded, allow drying time of 20 hours before sanding	
3	EPIFANES PP Varnish Extra	1	Thinner for P Varnish Extra	. 00	2-3 hours	Sanding not required		
4	EPIFANES PP Varnish Extra	1	Thinner for P Varnish Extra		2-3 hours	Sanding not required	If sanded, allow drying time of 20 hours before sanding	
5	EPIFANES Poly-urethane Clear Gloss	3	Poly-urethand Brushthinner		24 hours	360 wet or finer	If subsequent coat is applied within 48 hours, sanding between coats is not required.	Page 45

What to do on an existing two-component isolating varnish system on tropical wood and maintenance

We advise applying one or two maintenance coats when loss of gloss is noticed. The weather- and atmospheric conditions to which the finish is subjected will determine the amount of time between maintenance coats. At least one annual coat should be applied obeying the surface preparation.

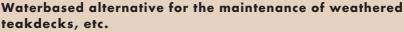
If the system is finished with a two-component varnish, maintenance should

be executed with either EPIFANES Poly-urethane Clear Gloss Varnish (twocomponent) or EPIFANES Clear Varnish (one-component). If the system is finished with a one-component varnish, maintenance can only be done with FPIFANES Clear Gloss Varnish

TEAK DECKS

Generally, deck areas subject to traffic are not varnished because of the potential dangers involving in slipping. After ensuring the decks are appropriately cleaned, prepared and dried, these areas may be treated with EPI-FANES Teak Oil Sealer in order to assist in the prevention of weathering. Apply EPIFANES Teak Oil Sealer with a wide brush or lint-free cloth until saturation of the wood has been achieved. Surplus material must be removed with a lint-free cloth. Excessive build-up must be avoided. EPIFANES Teak Oil Sealer may be applied wet-on-wet.

NEW



Epifanes Teak-O-Bello and Epifanes Teak-O-Clean & Bright (more information on page 47).

Weathered teak(-decks) or teak that has been treated with teak oil should first be cleaned with Epifanes Teak-O-Clean & Bright.

Instructions:

First, moisten the wood with fresh water. Shake the Teak-O-Clean & Bright can thoroughly before use. Apply liberally with a soft cloth or sponge and allow to soak for 5 minutes. Scrub the surface with a stiff brush or scrubbing pad with the wood grain. Immediately rinse well with fresh water. Allow the teakwood to fully dry. Allow the wood to dry.

For prolonged protection from renewed weathering, allow to fully dry and treat the surface with Epifanes Teak-O-Bello. Shake Teak-O-Bello for at least one minute prior to use. Apply a very thin coat of Teak-O-Bello over the surface with a lint-free cloth. After thirty minutes dry time, apply a second thin coat. Remove surplus material from caulking seams in teak decks. Teak-O-Bello will not effect the caulking in teak decks. i.e. polysulfide, polyurethane etc







One-component paint system on wood above the waterline

After surface preparation (see page 7)

steps	Product	Number of coats	•	ining io %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Multi Marine Primer	1	Brushthinner for Paint & Varnish	5	24 hours	180-220 dry		Page 53
2	EPIFANES Combi Filler	-	-	-	24 hours	220-280 dry	Apply in thin layers. Max. 1 mm. per coat.	Page 56
	OR							
2	EPIFANES Mono-Fill	1	Brushthinner for Paint & Varnish	0-5	24 hours	220-280 dry	Only for filling of wood grain	Page 56
	FINISH BY CHOICE	WITH:						
3	EPIFANES Yacht Enamel	1 1 2-3	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 49
	OR:							
3	EPIFANES Mono-urethane	1 1 2-3	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 49
	OR:							
3	EPIFANES Nautiforte	1 1 2-3	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 48

Nonskid

In order to obtain a nonskid surface on decks, the last two coats of the above mentioned system may be replaced by two coats EPIFANES Nonskid Deckcoating or by two coats EPIFANES Monourethane to which EPIFANES Nonskid Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.

What to do on an existing one-component paint system on wood above the waterline and maintenance

If the existing paint system is intact, one or more coats may be applied on the well cleaned, degreased and with 320 grit abrasive paper lightly sanded surface. Paint systems in poor condition must be removed. After surface preparation, a new paint system, as described above may be applied. After cleaning, degreasing and sanding of the surface, EPIFANES Yacht Enamel, EPIFANES Monourethane or EPIFANES Nautiforte may be applied on practically all existing one-component systems. EPIFANES Monourethane and EPIFANES Nautiforte may also be applied on existing well cleaned and sanded two-component poly-urethane based systems.

Although for reasons of flexibility we recommend to apply a one-component system on wood, it is possible to apply a two-component paint system on marine plywood which is dimensionally stable.

Two-component paint system on wood above the waterline (EPIFANES Poly-urethane) After surface preparation (see page 7)

steps	Product	Number of coats	-	ining io %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Epoxy Primer	1	Thinner D-601	25	24 hours	180-220 dry	Apply by stiff brush in order to fill the wood grain.	Page 51
2	EPIFANES Epoxy Filler 1300	-	-	-	24 hours	100-120 dry	Fill only when necessary. Before sanding, degrease with EPIFANES Spraythinner for Paint and Varnish or denaturated alcohol to remove tacklayer.	Page 55
3	EPIFANES Epoxy Primer	1	Thinner D-601	0-10	24 hours	320 dry		
4	EPIFANES Poly- urethane Colour	3	Poly-urethane Brushthinner	0-5	24 hours	360 wet or finer	If subsequent coat is applied within 48 hours, sanding between coats is not required.	Page 49

Instead of applying the two last coats of EPIFANES Poly-urethane, two coats of EPIFANES Monourethane or EPIFANES Nautiforte may be applied. This one-component finish may be preferred if a more elastic topcoat is desired. The one-component finish also provides easier maintenance. In this case,

the final coat of Poly-urethane should be sanded with a coarser git (220) wet or dry abrasive paper to ensure optimum adhesion between coats.

Nonskid

In order to obtain a nonskid surface on decks, add EPIFANES Nonskid Beads to the last two coats EPIFANES Poly-urethane (two-component) or replace these last two coats by two coats EPIFANES Nonskid Deckcoating (one-component) or by two coats EPIFANES Monourethane (one-component) to which EPIFANES Nonskid Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.

What to do on an existing two-component paint system on wood above the waterline and maintenance.

If the paint surface is intact, clean, degrease and sand with 320 grit wet or dry abrasive paper to a smooth surface. Over the original poly-urethane paint, apply one or two coats EPIFANES Poly-urethane. If required, use EPIFANES Fibreglass Filler and/or EPIFANES Epoxy Primer first. For this system procedure, refer to the two-component paint system mentioned above.

Wooden bilges (Epifanes Bilge Paint) After surface preparation

steps	Product		Epifanes Thinning Thinner ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Multi Marine Primer	1	Brushthinner for 0-5 Paint & Varnish	24 hours	320 dry		Page 53
2	EPIFANES Bilge Paint	2	Brushthinner for 0-5 Paint & Varnish	24 hours	320 dry		Page 50

The Waterline

It is recommended to strike the boot top approximately 5 cm. above the waterline, while boat is fully loaded. This means that the underwater paint system should extend 5 centimetres above the actual waterline. This will prevent the topside (including the waterline) paint system from being affected by constant immersion in water. There is a special EPIFANES waterline paint available which can be applied directly over existing paint systems. It is advised to remove masking tape within one hour of the waterline paint application.

WOOD TREATED WITH EPOXY RESIN

If an epoxy resin has been applied on wood, or the wood has been glued with an epoxy resin, it is necessary to seal off the epoxy with a two-component product. Two-component products cure and adhere well on epoxy resins unlike many one-component products. As the UV-resistance of epoxy resins is limited when uncovered, we recommend to apply a UV-protecting paint- or varnish system in order to protect the epoxy resin. Ensure that the epoxy resin has been cured for at least two weeks before any product is applied. Newly applied epoxy resins may have a greasy surface. This layer should be removed before applying a paint or varnish system.

Surface preparation

- 1. Allow at least 48 hours for the epoxy resin to cure.
- 2. Clean well with fresh water and ammonia to remove the greasy top layer.
- 3. Wash down with fresh water and allow to dry well.
- 4. After drying, sand with 280 grit abrasive paper.
- 5. Clean the surface with EPIFANES Fibreglass Prep Cleaner.

Two-component varnish system on epoxy resin

stens			Epifanes Thinning Thinner ratio %		Abrasive paper	Remarks	Product information
1	EPIFANES Poly-urethane Clear Gloss	3	Poly-urethane 0-5 Brushthinner	24 hours	360 wet or finer	This varnish contains a UV-filter protecting the epoxy resin against discoloration and loss of gloss.	Page 45



One-component varnish system on epoxy resin

steps	Product	Number of coats	-	ning io %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Poly-urethane Clear Gloss	1	Poly-urethane Thinner	0-5	24 hours	320 wet	Allow this coat 48 hours to cure	Page 45
	OR:							
1	EPIFANES PP Varnish	1	Thinner for PP Varnish Extra	0-5	24 hours	320 wet	Allow this coat 48 hours to cure	Page 46
2	EPIFANES Clear Gloss Varnish	2	Brushthinner for Paint & Varnish	0-5	24 hours	400 wet or finer	More coats are advised	Page 43

Two-component coloured system on epoxy resin

steps				Thinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Poly-urethane Colour	3	Poly-urethan Brushthinne		24 hours	360 wet or finer		Page 49

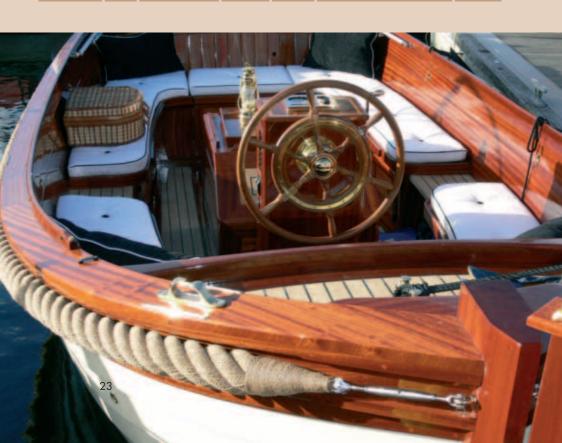
One-component coloured system on epoxy resin

steps	Product	Number of coats	•	nning tio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Poly-urethane Colour	1	Poly-urethane Brushthinner	0-5	24 hours	320 wet	Allow this coat 48 hours to cure	Page 49
	FINISH BY CHOICE	WITH:						
2	EPIFANES Mono-urethane	2	Brushthinner for Paint & Varnish	0-5	24 hours	400 wet or finer		Page 49
	OR:							
2	EPIFANES Nautiforte	2	Brushthinner for Paint & Varnish	0-5	24 hours	400 wet		Page 48

Wood below the waterline

One-component paint system on wood below the waterline (EPIFANES Underwaterprimer) After surface preparation

steps	Product	Number of coats	Epifanes Thinning Thinner ratio %	1''	Abrasive paper	Remarks	Product information
1	EPIFANES Underwaterprimer	1	Brusthinner for 15-25 Paint & Varnish	24 hours	Sanding not required	Apply by brush in order to fill the wood. Stir well prior to use.	Page 56
2	EPIFANES Underwaterprimer	3-4	Brusthinner for 0-5 Paint & Varnish	24 hours	Sanding not required	Apply by brush or roller. Allow the system 14 days to cure. Degrease before applying the antifouling.	
3	EPIFANES Foul-Away	2	Do not thin	6 hours	Do not sand	Allow 18 hours before launching.	Page 57





Fibreglass

General surface preparation

New fibreglass has to be at least 4 weeks old before a paint system can be applied. Usually the fibreglass that is to be painted is much older and this surface must be cleaned with soapy water in order to remove all water-soluble dirt. After drying, degrease with EPIFANES Fibreglass Prep Cleaner to remove all wax substances. Make sure that the cloth is renewed constantly so that all grease, wax, etc. is not just replaced, but completely removed. This is important in order to avoid the possibility of any remaining dirt or wax being sanded into the surface.

Before continuing with the process, check the condition of the fibreglass to be painted. If the gelcoat is smooth and only shows dicoloration or slight loss of gloss, the fibreglass surface will only require a light sanding with 320 grit dry abrasive paper. Clean the entire surface once more with EPIFANES Fibreglass Prep Cleaner.

All cratering and cracking must be checked. If the damage is caused by a weakened fibreglass laminate, necessary repairs must be made first. If existing craters and cracks are stable, they may be filled to a smooth surface with EPIFANES Fibreglass Filler (above the waterline) or EPIFANES Epoxy Filler 1300 (below the waterline). Make sure that all craters and cracks are filled thoroughly. If necessary, sand inside the cracks before filling to ensure good mechanical bond. When the filler has cured, lightly sand the entire surface with 280 grit dry abrasive paper. Only after this preparation has been completed, a paint system can be applied.



Fibreglass above the waterline

IMPORTANT: On the areas of the surface that have been filled with EPIFANES Fibreglass Filler, apply one coat of the chosen paint, thinned 15%. This acts as a sealer coat and prevents moisture from entering the filler. We recommend applying the sealer coat immediately after the EPIFANES Fibreglass Filler has cured (30-60 minutes). Sand the filler with 280 dry abrasive paper before applying the sealer coat. After drying (24 hours) lightly sand the sealer coat.

One-component paint system on fibreglass above the waterline After surface preparation

steps	Product	Number of coats	•	nning tio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information	
1	EPIFANES Multi Marine primer	1	Brushthinner for Paint & Varnish	0-5	24 hours	320 dry	Necessary if overcoated with EPIFANES Yacht Enamel. Fills small irregularities in the gelcoat and provides even colour. May in any case be tinted with finishing paint.	Page 53	
FINISH BY CHOICE WITH:									
2	EPIFANES Yacht Enamel	3	Brushthinner for Paint & Varnish	0-5	24 hours	400 wet	See above.	Page 49	
	OR:								
2	EPIFANES Mono-urethane	3	Brushthinner for Paint & Varnish	0-5	24 hours	400 wet	May also be directly applied on smooth gelcoat. In this case, thin 1st. coat 5-10%.	Page 49	
	OR:								
2	EPIFANES Nautiforte	3	Brushthinner for Paint & Varnish	0-5	24 hours	400 wet	May also be directly applied on smooth gelcoat. In this case, thin 1st. coat 5-10%.	Page 48	

Nonskid

In order to obtain a nonskid surface on decks, the last two coats of the system may be replaced by two coats EPIFANES Nonskid Deckcoating or by two coats EPIFANES Monourethane to which EPIFANES Nonskid Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.

What to do on an existing one-component paint system on fibreglass above the waterline and maintenance.

If the paint surface is intact; clean, degrease and sand with 320 grit wet or dry abrasive paper to a smooth surface. Over the original paint, apply one or two coats EPIFANES Yacht Enamel, EPIFANES Monourethane or EPIFANES Nautiforte. If required, use EPIFANES Fibreglass Filler and/or EPIFANES Fibreglass Primer first. For this system procedure, refer to the one-component system mentioned above.

Two-component paint system on fibreglass above the waterlineAfter surface preparation

steps	Product	Number of coats	Epifanes Th Thinner ro	inning atio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Epoxy Primer	1	Thinner D-601	5-10	24 hours	220 dry	Fills small irregularities in the gelcoat and provides even colour.	Page 49
2	EPIFANES Poly-urethane	3	Poly-urethane Brushthinner	0-5	24 hours	400 wet or finer	If subsequent coat is applied within 48 hours, sanding between coats is not required. If directly applied on gelcoat, thin 1st. coat 5-10%.	Page 48

IMPORTANT: On the areas of the surface that have been filled with EPIFANES Fibreglass Filler, apply one sealer coat of EPIFANES Poly-urethane, thinned 15% with EPIFANES Poly-urethane Thinner. This sealer coat prevents moisture from entering the filler and prevents absorption of subsequent coats into the filled areas. We recommend applying the sealer coat right after the EPIFANES Fibreglass Filler has cured (30-60 minutes). Sand the filler with 280 grit dry abrasive paper before applying this sealer coat.

Nonskid

In order to obtain a nonskid surface on decks, add EPIFANES Nonskid Beads to the last two coats EPIFANES Poly-urethane or replace these last two coats by two coats EPIFANES Nonskid Deckcoating (one-component) or by two coats EPIFANES Monourethane (one-component) to which EPIFANES Nonskid Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.

What to do on an existing two-component paint system on fibreglass above the waterline and maintenance.

If the paint surface is intact, clean, degrease and sand with 320 grit wet or dry abrasive paper to a smooth surface. Over the original poly-urethane paint, apply one or two coats EPIFANES Poly-urethane. If required, use EPIFANES Fibreglass Filler and/or EPIFANES Epoxy Primer first. For this system procedure, refer to the two-component paint system mentioned above.

Fibreglass bilges (EPIFANES Bilge Paint) on fibreglass

After surface preparation

steps	Product		Epifanes Thinning Thinner ratio %		Abrasive paper	Remarks	Product information
1	EPIFANES Fibreglassprimer	1	Brushthinner for 0-5 Paint & Varnish	24 hours	320 dry		Page 54
2	EPIFANES Bilge Paint	2	Brushthinner for 0-5 Paint & Varnish	24 hours	320 dry		Page 50

The Waterline

It is recommended to strike the boot top approximately 5 cm. above the waterline, while boat is fully loaded. This means that the underwater paint system should extend 5 centimetres above the actual waterline. This will prevent the topside (including the waterline) paint system from being affected by constant immersion in water. There is a special EPIFANES waterline paint available which can be applied directly over existing paint systems. On bare fibreglass use EPIFANES Fiberglassprimer first. It is advised to remove masking tape within one hour of the waterline paint application.



Fibreglass below the waterline

Two-component paint system on fibreglass below the waterlineAfter surface preparation

steps	Product	Number of coats	7	hinning atio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Interimcoat	1	Thinner D-601	0-10	12 hours	Do not sand	Allow this coat to cure for at least 5 days and degrease before applying the antifouling	Page 52
2	EPIFANES Foul-Away	2	Do not thin	-	6 hours	Do not sand	Allow 18 hours before launching.	Page 57

Two-component paint system on fibreglass below the waterline (osmosis prevention) After surface preparation

steps	Product	Number of coats		hinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Interimcoat	1	Thinner D-601	0-10	12 hours	Do not sand		Page 52
2	EPIFANES Epoxy Coating HS	5	Thinner D-100	5-15	16 hours	180-220 dry	If recoated between 16 -72 hours, sanding between coats is not necessary.	Page 52
3	EPIFANES Interimcoat	1	Thinner D-601	0-10	12 hours	Do not sand	Allow this coat to cure for at least 5 days and degrease before applying the antifouling.	Page 52
4	EPIFANES Foul-Away	2	Do not thin	-	6 hours	Do not sand	Allow 18 hours before launching.	Page 57



Steel

General surface preparation

Make sure that all rust, dirt, wax or other contamination have been removed. Preferably by sandblasting SA 2,5. If sandblasting is not possible. Sand the entire surface manually with 60-80 grit dry abrasive paper to a smooth surface. Degrease with EPIFANES Spraythinner for Paint & Varnish or EPIFANES Thinner D-601. When painting, make sure that the relative air humidity does not exceed 85% and the temperature of the (bare) steel is at least 3°C (5°F.) above the dew point. Apply the first coat of the anti-corrosive primer system as soon as possible after sandblasting or manual derusting to ensure the least amount of oxidation.



Steel above the waterline

One-component paint system on steel above the waterline

After surface preparation

steps	Product	Number of coats		nning tio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Multi Marine Primer	3	Brushthinner for Paint & Varnish	0-5	24 hours	180-220 dry	Apply first coat by brush in order to fill the pores of the steel	Page 53
2	EPIFANES Combi Filler	-	-	-	24 hours	220-280 dry	Apply in thin layers. Max. 1 mm. per coat.	Page 56
	FINISH BY CHOICE	WITH:						
3	EPIFANES Yacht Enamel	1 1 2	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 49
,	OR:							
3	EPIFANES Mono-urethane	1 1 2	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 49
	OR:							
3	EPIFANES Nautiforte	1 1 2	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 48

Nonskid

In order to obtain a nonskid surface on decks, the last two coats of the above system may be replaced by two coats EPIFANES Nonskid Deckcoating or by two coats EPIFANES Monourethane to which EPIFANES Nonskid Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.



What to do on an existing one-component paint system on steel above the waterline and maintenance.

If the paint surface is intact; clean, degrease and sand with 320 crit wet or dry abrasive paper to a smooth surface. Over the original paint, cpply one or two coats EPIFANES Yacht Enamel, EPIFANES Monourethare or EPIFANES Nautiforte. For this system procedure, refer to the one-component system mentioned above.

Two-component paint system on steel above the waterlineAfter surface preparation

steps	Product			Thinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Epoxy Primer	1	Thinner D-60	1 20-25	12 hours	180-220 dry	Apply by brush in order to fill the pores of the steel.	Page 51
2	EPIFANES Epoxy Filler 1300	-	-	-	24 hours	220 dry	Only when necessary.	Page 55
3	EPIFANES Epoxy Finishing Filler	-	-	-	24 hours	220 dry	Only when necessary.	
4	EPIFANES Epoxy Primer	2	Thinner D-60	1 5-10	12 hours	220 dry		Page 51
5	EPIFANES Poly-urethane	3	Poly-urethane Brushthinner	0-5	24 hours	400 wet	If subsequent coat is applied within 48 hours, sanding between coats is not required.	Page 49



Nonskid

In order to obtain a nonskid surface on decks, add EPIFANES Nonskid Beads to the last two coats EPIFANES Poly-urethane or replace the last two coats of the above system by two coats EPIFANES Nonskid Deckcoating (one-component) or by two coats EPIFANES Monourethane (one-component) to which EPIFANES Nonskid Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.

What to do on an existing two-component paint system on steel above the waterline and maintenance.

If the paint surface is intact, clean, degrease and sand with 320 grit wet or dry abrasive paper to a smooth surface. Over the original poly-urethane paint, apply one or two coats EPIFANES Poly-urethane. For this system procedure, refer to the two-component paint system mentioned above.

Steel bilges (EPIFANES Bilge Paint) After surface preparation

steps	Product		Epifanes Thinning Thinner ratio %		Abrasive paper	Remarks	Product information
1	EPIFANES Multi Marine Primer	2	Brushthinner for 0-5 Paint & Varnish	24 hours	320 dry	Apply first coat by brush in order to fill the pores of the steel.	Page 53
2	EPIFANES Bilge Paint	2	Brushthinner for 0-5 Paint & Varnish	24 hours	320 dry		Page 50

The Waterline

It is recommended to strike the boot top approximately 5 cm. above the waterline, while boat is fully loaded. This means that the underwater paint system should extend 5 centimetres above the actual waterline. This will prevent the topside (including the waterline) paint system from being affected by constant immersion in water. There is a special EPIFANES waterline paint available which can be applied directly over existing paint systems. It is advised to remove masking tape within one hour of the waterline paint application.



Steel below the waterline

One-component paint sytstem on steel below the waterline (EPIFANES Underwaterprimer) After surface preparation

steps	Product	Number of coats	•	nning tio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Underwaterprimer	1	Brushthinner for Paint & Varnish	15-25%	24 hours	Sanding not required	Apply by brush in order to fill the pores of steel. Stir well prior to use.	Page 56
2	EPIFANES Underwaterprimer	5	Brushthinner for Paint & Varnish	0-5	24 hours	Sanding not required	Apply by brush or roller. Allow the system 14 days to cure. Degrease before applying the antifouling.	
3	EPIFANES Foul-Away	2	Do not thin		6 hours	Do not sand	Allow 18 hours before launching.	Page 57

Two-component paint system on steel below the waterline (EPIFANES Epoxy Coating HS) After surface preparation

steps	Product	Number of coats		hinning atio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Epoxy Primer	1	Thinner D-601	20-25	12 hours	180-220 dry	Apply by brush in order to fill the pores of steel	Page 51
2	EPIFANES Epoxy Filler 1300	-	-	-	24 hours	220 dry	Only when necessary	Page 55
3	EPIFANES Epoxy Coating HS	5	Thinner D-100	5-15	16 hours	180-220 dry	If recoated between 16 -72 hours, sanding between coats is not necessary.	Page 52
4	EPIFANES Interimcoat	1	Thinner D-601	0-10	12 hours	Do not sand	Allow this coat to cure for at least 5 days to cure and degrease before applying the antifouling.	Page 52
5	EPIFANES Foul-Away	2	Do not thin	-	6 hours	Do not sand	Allow 18 hours before launching.	Page 57



Aluminium

General surface preparation

New aluminium

The preparation of aluminium is very important. New aluminium has a greasy residue on the surface which must be removed. On new aluminium it is advised to apply one thin coat Epifanes Washprimer AQ. The Washprimer AQ provides an excellent adhesion between the new aluminium and the first layer of the paint system

Existing aluminium

Although aluminium hardly corrodes, a thin layer of oxidation can be formed which must be removed. For optimum adhesion the surface must therefore be well degreased and drysanded with 80 grit abrasive paper before a paint system can be applied. After surface preparation, one coat Epifanes Multi Marine Primer may be applied on the aluminium surface. Epifanes Multi Marine Primer provides an excellent adhesion between the coarsely sanded aluminium and subsequent coat of the paint system.



Aluminium above the waterline

One-component paint system on aluminium above the waterline After surface preparation

steps	Product	Number of coats		nning tio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES- Washprimer AQ	1	Do not thin	_	2 hours	Do not sand	Apply very thin coat. Avoid curtains.	Page 55
2	EPIFANES Multi Marine Primer	1	Brushthinner for Paint & Varnish	0-5	24 hours	220 dry		Page 53
3	EPIFANES Combi Filler	_	_	_	24 hours	220-280 dry	Apply in thin layers. Max. 1 mm. per coat.	Page 56
	FINISH BY CHOICE	WITH:						
4	EPIFANES Yacht Enamel	1 1 2	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 49
	OR:	_						
4	EPIFANES Mono-urethane	1 1 2	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 49
	OR:							
4	EPIFANES Nautiforte	1 1 2	Brushthinner for Paint & Varnish	20 5 0-5	24 hours 24 hours 24 hours	320 dry 360 wet 400 wet	Only on the filled areas. This is the base coat Optional: finer sanding up to 800 grit	Page 48

The use of Epifanes Washprimer AQ is advised for new aluminium only. Existing aluminium should be well degreased and coarsely sanded followed by one primer coat of Epifanes Multi Marine Primer prior to the application of the finishing coats.

Nonskid

In order to obtain a nonskid surface on decks, the last two coats of the system may be replaced by two coats EPIFANES Nonskid Deckcoating or by two

coats EPIFANES Monourethane to which EPIFANES Nonskid Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.

Two-component paint system on aluminium above the waterlineAfter surface preparation

steps	Product	Number of coats		Thinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Washprimer AQ	1	Do not thin.	-	2 hours	Do not sand.	Apply very thin coat. Avoid curtains.	Page 55
2	EPIFANES Epoxy Primer	1	Thinner D-60	1 5-10	12 hours	180-220 dry		Page 51
3	EPIFANES Epoxy Filler 1300	_	_	-	24 hours	220 dry	Only if necessary.	Page 55
4	EPIFANES Epoxy Finishing Filler	-	_	-	24 hours	220 dry	Only if necessary.	
5	EPIFANES Epoxy Primer	2	Thinner D-60	1 5-10	12 hours	220 dry		Page 51
6	EPIFANES Poly-urethane	3	Poly-urethane Brushthinner		24 hours	400 wet or finer	If subsequent coat is applied within 48 hours, sanding between coats is not required.	Page 49



What to do on an existing one-component paint system on aluminium and maintenance.

If the paint surface is intact; clean, degrease and sand with 320 grit wet or dry abrasive paper to a smooth surface. Over the original paint, apply one or two coats EPIFANES Yacht Enamel, EPIFANES Monourethane or EPIFANES Nautiforte. For this system procedure, refer to the one-component system mentioned above.

Nonskid

In order to obtain a nonskid surface on decks, add EPIFANES Nonskid Beads to the last two coats EPIFANES Poly-urethane or replace the last two coats of the above system by two coats EPIFANES Nonskid Deckcoating (one-component) or by two coats EPIFANES Monourethane (one-component) to which EPIFANES Polypropylene Beads have been added. Apply by roller (brushing will not produce as even a coat) and allow at least 72 hours for the system to cure.

What to do on an existing two-component paint system on aluminium and maintenance.

If the paint surface is intact, clean, degrease and sand with 320 grit wet or dry abrasive paper to a smooth surface. Over the original Poly-urethane paint, apply one or two coats EPIFANES Poly-urethane. For this system procedure, refer to the two-component paint system mentioned above.

The Waterline

It is recommended to strike the boot top approximately 5 cm. above the water-line, while boat is fully loaded. This means that the underwater paint system should extend 5 centimetres above the actual waterline. This will prevent the topside (including the waterline) paint system from being affected by constant immersion in water. There is a special EPIFANES waterline paint available which can be applied directly over existing paint systems. It is advised to remove masking tape within one hour of the waterline paint application.

Aluminium below the waterline

Two-component paint system on aluminium below the waterline After surface preparation

steps	Product	Number of coats	•	Thinning ratio %	Drying times at 18°C. per coat	Abrasive paper	Remarks	Product information
1	EPIFANES Washprimer AQ	1	Do not thin	_	2 hours	Do not sand	Apply thin layer. Avoid curtains.	Page 55
2	EPIFANES Epoxy Coating HS	1	Thinner D-10	0 5-15	16 hours	180-220 dry		Page 52
3	EPIFANES Epoxy Filler 1300	_	_		_	24 hours	100-120 dry. Only if necessary	Page 55
4	EPIFANES Epoxy Coating HS	4	Thinner D-10	0 5-15	16 hours	180-220 dry	If recoated between 16 - 72 hours, sanding between coats is not necessary.	Page 52
	EPIFANES Interimcoat	1	Thinner D-60	1 0-10	12 hours	Do not sand	Allow this coat to cure for at least 5 days and degrease before applying the antifouling.	Page 52
6	EPIFANES Foul-Away	2	Do not thin	_	6 hours	Do not sand	Allow 18 hours before launching.	Page 57





Product descriptions

CLEAR FINISHES





Epifanes Clear Varnish (one-component) contains extra UV filter

A clear, high gloss, traditional one-component varnish, based on tung oil, phenol and alkyd resin with excellent outdoor durability, containing an ultra violet filter protecting the wood against discoloration. For use on bare wood and intact existing (one- and two-component) varnishes both for inside and outside above the waterline. This varnish is famous for its high gloss retention, long lasting properties, unique flowing characteristics and high build capacity even in tropical climates.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish Recoatable: after 24 hours at 18°C. (65°F.)

Coverage: One liter is sufficient for 14 sq.meters (150 sq. feet). Package: 250 ml. - 500 ml. - 1000 ml. - 5000 ml.



Epifanes Rubbed Effect Varnish (one-component)

A quick drying, clear, one-component, interior satin finish, based on a poly-urethane/alkyd resin. This interior finish gives superior protection against alcohol and other aggresive household chemicals. Apply as a finish coat over several build-up coats of Epifanes Clear Gloss Varnish.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish Recoatable: after 12 hours at 18°C. (65°F.)

Coverage: One liter is sufficient for 13 sq.meters. (140 sq. feet) Package: 500 ml. - 1000 ml.





Epifanes Aqua Marine

A very quick drying, scratch resistant one-component water-based interior varnish providing a beautiful satin sheen. Other characteristics are outstanding flowing ability and excellent resistance against alcohol and other household chemicals and very low on VOC. Suitable as water based alternative to traditional solvent based interior varnishes over several build-up coats of Epifanes Clear Gloss Varnish. Apply by nylon brush and roll out along the grain of the wood. Aqua Marine shows milky in the can, but dries into a clear film.

Thinner: all applications: fresh water Recoatable: after 6 hours at 18°C. (65°F.)

Coverage: One litre is sufficient for 12 sq. metres (125 sq. feet)

Package: 1000 ml.



Epifanes Woodfinish Gloss (one-component)

contains UV filter

A clear, high gloss varnish-like finish with excellent adhesion to new teak and other exotic woods. For use where a glossy, varnished look is desired. Sanding between coats is not required when the next coat is applied within 72 hours. To be used on teakwood, iroco and as an alternative for continuous maintenance of wood oil systems, for interior and exterior work above the waterline in both fresh and salt water environments. When applied on non-oily wood that does not need to "breath" a minimum of 8-10 coats is required. Not suited on bankirai.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish Recoatable: after 24 hours at 18°C. (65°F.) No sanding required if recoated within 72 hours.

Coverage: One liter is sufficient for 12 sq. meters (130 sq. feet) Package: 500 ml. - 1000 ml.



Epifanes Woodfinish Matte (one-component)

A clear satin finish for use over Epifanes Woodfinish Gloss (one-component). Provides a beautiful, satin sheen for interior use.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish Recoatable: after 12 hours at 18°C. 65°F.)

Coverage: One liter is sufficient for 12 sq. meters. (130 sq. feet)

Package: 500 ml. - 1000 ml.



Epifanes Rapidclear (one-component)

contains UV filter

Superior quality, semi-gloss wood finish, based on modified alkyd/urethane resins and UV filters. Rapidclear, providing excellent protection in all climates, is the answer for a quick and easy alternative to conventional varnish. For long term protection and enhancement of all interior and exterior marine and household woods above the waterline. Epifanes Rapidclear provides an enhancing U.V. protecting film. It bonds extremely well to teak and other oily woods, preventing discoloration and emphasizes the natural grain of the wood.

Epifanes Rapidclear can be used for renewing weathered areas, prior to a varnish or as a full system for those requiring a quick and easy semi-gloss finish with excellent breathing properties, flexibility, maximum durability, U.V. protection and longevity. Apply by brush, foam brush, roller or spray 3 to 4 coats. Rapidclear can be applied every 5-6 hours. Three to four coats are sufficient under most conditions. Sanding between coats is not required. If topcoated with varnish, sand with 220 grit dry abrasive paper. Easy touch up and maintenance.

Thinner: Brush application. Do not thin

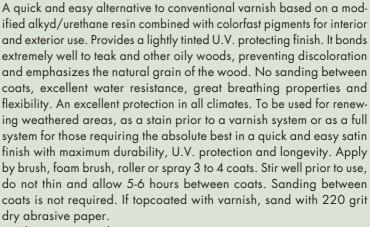
Spray application. Epifanes Spray Thinner for Paint & Varnish

Recoatable: After 5-6 hours at 18°C (65°F) Coverage: 750 ml is sufficient for 10 sq metres

Package: 750 ml

Epifanes Rapidcoat (one-component)

contains UV filter



Thinner: Do not thin

Recoatable: after 5-6 hours at 18°C. (65°F.)

Coverage: 750ml. is sufficient for 10-16sq. meters (130 sq. feet)

depending on substrate *Package:* 750ml.

contains UV filter

Epifanes Poly-urethane Clear Gloss (two-component)

A high gloss, two-component, polyester saturated, aliphatic urethane finish with excellent outdoor durability. Contains a UV-filter. To be used on intact existing poly-urethane varnish systems, as a complete varnish





system on bare dimensionally stable wood (i.e. marine plywood), as a build-up coat prior to a one-component varnish system, as a protective coat on epoxy resins or as an intermediate coat on epoxy resins when a one-component finish is desired. Suitable for fresh and salt water, for interior and exterior use.

Mixing ratio is 2 parts component A to one part component B by weight. Each can of base is partially full. Pour the reactor (B) into the can of base (A) and stir thoroughly. Allow to activate for 20-30 minutes before use. Potlife after mixing 3-4 hours at 20°C. (70° F.) Temperature should be between 15°C. and 27°C. (60°-80°F.) during application.

Thinner: Brush/roller application - Epifanes Poly-urethane Brushthinner Spray application - Epifanes Poly-urethane Spraythinner

Recoatable: After 24 hours at 18°C. (65° F.)

Coverage: 750 grs. is sufficient for 9 sq. meters (100 sq. feet) Package: 750 grs. (comp. A 500 grams.-comp. B 250 grams.)

7.5 kg. (comp. A 5 kilograms. - comp. B. 2.5 kilograms.)



Epifanes Poly-urethane Clear Satin (two-component)

A hard scratch resistant two-component, polyester saturated, aliphatic urethane satin finish. To be used as a satin finish over intact existing poly-urethane varnish systems on dimensionally stable wood (i.e. marine plywood). Excellent for use on cabin soles or salon tables. Mixing ratio is 2 parts component A to one part component B by weight. Each can of base is partially full. Pour the reactor (B) into the can of base (A) and stir thoroughly. Allow to activate for 20-30 minutes before use. Potlife after mixing 3-4 hours at 20°C. (70° F.). Temperature should be between 15°C. and 27°C. (60°-80°F.) during application.

Thinner: Brush application - Epifanes Poly-urethane Brusthinner Spray application - Epifanes Poly-urethane Spraythinner Recoatable: After 24 hours at 18°C. (65°F.)

Coverage: 750 grs. is sufficient for 9 sq. meters (100 sq. feet) Package: 750 grs. (comp.A 500 grams.-comp.B 250 grams.)



Epifanes PP Varnish Extra (two-component)

contains UV filter

A hard, two-component build-up varnish with excellent filling properties based on alkyd resin and isocyanate. Excellent resistance to scratching, water, alcohol and household chemicals. For use as a quick drying build-up coat, as a sealer or filling coat in a one-component and twocomponent synthetic or polyester based varnish system or, as an isolating sealer for oily and vaporous woods such as teak and iroco. Additionally, can be used as an interior finish on any wood type i.e. cabinet doors, galley furniture, interior trim, etc. Ideally suited as a maintenance coat over existing, intact, clear, two-component interior varnish systems. For exterior use, overcoating with a minimum of three coats Epifanes Clear Gloss Varnish (one-component) or three coats Epifanes Poly-urethane Clear Gloss (two-component) is required to provide UV-protection. Mixing ratio is 1:1 by volume. Potlife after mixing 8 hours at 20°C. (70°F.). Temperature should be between 15°C. and 27°C. (60°-80°F.) during application.

Thinner: All applications - Epifanes Thinner for PP Varnish Extra

Recoatable: After 5 hours at 18°C. (65°F.) Brush wet-on-wet after 5 hours at 18°C. (65°F.) Spray wet-on-wet after 2.5 hours at 18°C. (65°F.)

Coverage: 2 liter is sufficient for 28 sq. meters (300 sq. feet)

Package: 2 ltr. (comp. A 1 ltr - comp. B 1 ltr.)



Epifanes Teak Oil Sealer (one-component)

An impregnating oil, based on linseed oil and alkyd resin. Protects teakwood from discoloration caused by weather or pollutants. Ideal for the maintenance of teak decks. Film build-up must be avoided. Apply with a wide brush or lint free cloth.

Thinner: Epifanes Brushthinner for Paint & Varnish

Recoatable: wet-on-wet

Coverage: 8-10 sq. metres (85-100 sq. feet)

Package: 1000 ml.





Epifanes Teak-O-Bello

Epifanes Teak-O-Bello is a water based coating for teak and other hardwoods. The unique, environmentally friendly formulation prevents the wood from weathering for an extended period of time. Fast and easy to apply. Teak-O-Bello lasts longer than solvent-based teak oils and teak sealers and resists the formation of mould. Teak-O-Bello will not effect the caulking in teak decks. i.e. polysulfide, polyurethane etc. Contains no VOC's, no toxic fumes and is solvent free. Suitable for fresh and salt water. For interior and exterior use

Thinner: do not thin

Recoatable: after 30 minutes

Coverage: 6 - 8m2 depending on surface



Package: 500 ml.

Use: shake at least 1 minute before use

Storage: frost free and away from direct sunlight.



Epifanes Teak-O-Clean & Bright

Epifanes Teak-O-Clean & Bright is a water based cleaner and brightener for teak and other tropical woods. Teak-O-Clean & Bright is fast, easy to apply and restores weathered, gray teak to its original color. Teak-O-Clean & Bright will not effect the caulking in teak decks, i.e. polysulfide, polyurethane etc. Suitable for fresh and saltwater. For prolonged protection from weathering, allow to fully dry and treat the surface with Epifanes Teak-O-Bello.

Thinner: do not thin

Recoatable: after 30 minutes

Coverage: 6 - 8 m² pending on surface

Package: 500 ml.

Use: shake at least 1 minute before use

Storage: frost free and away from direct sunlight.





Epifanes Nautiforte (one-component)

A high gloss one-component finish, based on siliconized alkyd resins. This finish provides outstanding weather durability, long lasting gloss retention, rapid wet film drying, minimal dirt retention and is non-yellowing. For use on wood, steel, aluminium and fibreglass above the waterline in combination with the appropriate primers or directly over well degreased and sanded fibreglass. For interior and exterior applications. Also for use as a maintenance coat on intact, degreased and sanded one-and two-component paint systems. Suitable for fresh and salt water.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish

Recoatable: After 18 hours at 18°C. (65°F.)

Coverage: One liter is sufficient for 14 sq meters. (150 sq. feet)

Package: 750 ml. (white also in 2000 ml.)
Colours: white, # 24 Oyster and # 25 Offwhite.



Epifanes Mono-urethane (one-component)

A hard, one-component, air-drying, high gloss finish paint based on urethane-alkyd resins. Provides superior covering and filling, long lasting weather durability and high gloss retention. For use on wood, steel, aluminium and fibreglass, for interior and exterior applications above the water-line in combination with the appropriate primers or directly on well degreased and sanded fibreglass. Also for use as a maintenance coat on intact well degreased and sanded one- and two-component paint systems. Do not apply directly on epoxy systems. Suitable for fresh and salt water.

Thinner: Brush application - Epifanes Brushtinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint and Varnish

Recoatable: After 24 hours at 18°C. (65°F.)

Coverage: One litre is sufficient for 15 sq. metres (160 sq. feet)

Package: 750 ml.

Colours: 17 colours according to Epifanes colour card



Epifanes Yacht Enamel (one-component)

A high gloss, one-component, alkyd-based, traditional marine finish. This enamel has very good flowing and covering properties and provides long lasting gloss retention and excellent weather durability. To be used on wood, steel, fibreglass and aluminium in combination with the appropriate primer systems, or as a maintenance coat on intact well-degreased and sanded one-component paint systems. Suitable for fresh and salt water, for interior and exterior use above the waterline.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish

Recoatable: After 24 hours at 18°C. (65°F.)

Coverage: one liter is sufficient for 15 sq meters (160 sq. feet) Package: 750 ml. (some colours in 2000 ml. - 4000 ml.) Colours: 45 colours according to Epifanes colour card



Epifanes Poly-urethane Colours (two-component)

A high gloss, two-component, polyester saturated, aliphatic urethane coating with excellent outdoor durability and weather resistance. The finish provides easy application by brush, roller or spray. To be used on wood, steel, fibreglass and aluminium in combination with the appropriate primer systems. For use as a maintenance coat on intact existing, well degreased and sanded Poly-urethane paint systems or

directly on well degreased and sanded fibreglass. Suitable for fresh and salt water, for interior and exterior use. Mixing ratio is 2 parts component A to one part component B by weight. Each can of base is partially full. Pour the reactor (B) into the can of base (A) and stir thoroughly. Allow to activate for 20-30 minutes before use. Potlife after mixing 3-4 hours at 20°C. (70° F.). Temperature should be between 15°C. and 27°C. (60°-80°F.) during application.

Thinner: Brush/roller application - Epifanes Poly-urethane Brushthinner Spray application - Epifanes Poly-urethane Spraythinner

Recoatable: After 24 hours at 18°C. (65°F.) Sanding is not required if recoated within 48 hours.

Coverage: 750 grs. is sufficient for 9 sq. meters (100 sq. feet) Package: 750 grs. (comp.A 500 grams. - comp.B 250 grams.)

Colours: 20 colours according to Epifanes colour card



Epifanes Nonskid Deckcoating (one-component)

A one-component, semi-gloss, urethane/alkyd based nonskid deckpaint containing measured amount of polypropylene beads as the nonskid agent. When the appropriate primers are applied this deckcoating is suitable for wood, fibreglass, steel and aluminium decks. Stir well before and during use. Application by roller provides an even distribution of the beads. Allow at least 72 hours to harden thoroughly. Epifanes Nonskid Beads are separately available in 20 gram containers for use in Epifanes Mono-urethane or Poly-urethane.

Thinner: Roller application - Epifanes Brushthinner for Paint & Varnish Recoatable: After 24 hours at 18°C. (65°F.) (allow 72 hours to harder thoroughly)

Coverage: 750 ml. is sufficient for 4-8 sq meters depending

on surface Package: 750 ml.

Colours: white, # 1 Cream, # 212 and # 213 grey



Epifanes Bilgepaint (one-component)

A protecting paint for use in bilge spaces, engine rooms etc. where a tough paint system is required. Can be applied over most substrates with the appropriate one-component primer systems.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish Recoatable: After 24 hours at 18°C. (65°F.)

Coverage: 750 ml. is sufficient for 7-8 sq meters (85 sq. feet)

Package: 750 ml. - 2000 ml. Colours: white and grey



Epifanes Waterline Paint

One component paint, especially formulated for use at the waterline on full paint systems over wood, steel, fiberglass or aluminium. Outstanding gloss, weather durability and gloss retention. Fresh and salt water resistant. It is recommended to strike the boot top 5-10 cm. Above the waterline, while boat is fully loaded, preventing constant water immersion.

Thinner: Epifanes Brushthinner for Paint & Varnish

Recoatable: After 24 hours at 18°C (65°F)

Coverage: 250 ml. Is sufficient for 3.75 sq. meters (41 sq. ft.)

Colours: White, blue, red, black & green.



Epifanes Multiforte

A one-component, semi gloss topcoat based on a special combination of medium oil alkyd/ urethane resin reinforced with acrylic copolymer. Provides rapid drying, excellent adherence, highly abrasive and weather resistant. Recommended for use on steel surfaces above the waterline where a highly abrasive resistant top coat is required, such as decks, deck-houses, gangways and derricks. For new work on bare steel in conjunction with anticorrosive primers such as Epifanes Multi Marine Primer or Werdol Metalprimer and maintenance of existing, well adhering one-component paint systems.

Recoatable: After 6 hours at 18°C / 65% RH.

Thinner brush and roller: Epifanes Brushthinner for Paint & Varnish Spray application: Epifanes Spraythinner for Paint & Varnish

Coverage: 1000 ml. is sufficient for approx. 10 sqm.

Colours: white, black, dark grey, middle grey, light grey, electric

blue, redbrown and green 218



PRIMERS

Epifanes Epoxy Primer (two-component)

An anti-corrosive primer based on an epoxy resin and zinc phosphate as the anti-rust agent. High build, high filling capacity and easy sanding. For use as a filling primer in a two-component poly-urethane paint system on (ply-)wood and fibreglass and as an anti-rust primer in a two-component poly-urethane paint system on steel and aluminium. For interior and exterior use above and below the waterline. Recoatable with all Epifanes two-component products. 20 minutes before use, pour component B (reactor) in component A (base) and stir well. The mixing ratio is 100 parts comp. A to 14 parts comp. B by weight (100 part comp. A to 25 part comp B. by volume). The correct mixing ratio quantity is already in the cans. Potlife after mixing is 8 hours max.

Thinner: All applications - Epifanes Thinner D-601

Recoatable: After 12 hours at 18°C. (65°F.). Within 5 days

without sanding

Coverage: one liter is sufficient for 12 sq meters

Package: 750 ml. - 2000 ml. - 4000 ml.

Colour: white



Epifanes Epoxy Coating HS (two-component)

A high solids anticorrosive epoxy coating, based on epoy resin and zinc phosphate for the maintenance of steel. Also recommended as an osmosis prevention system. If subsequent coats are applied within 48 hours, sanding between coats is unnecessary. For protection and preservation of (marine-) plywood, blasted and rust free steel, aluminium and fibreglass. For interior and exterior use above or below the waterline. Recoatable with all Epifanes two-component paints.

Thinner: All applications - Epifanes Thinner D-100 slow evaporating - Epifanes Thinner D-601 fast evaporating

Recoatable: After 16 hours at 18°C. (65°F.) Within 72 hours without sanding

Coverage: one liter is sufficient for 14 sq metres (130 sq. feet) at 65

micron dry filmthickness Package: 750 ml. - 4000 ml.

Colours: light grey, black, blue and redbrown



Epifanes Interimcoat (two-component)

A two-component primer and/or intercoat based on an epoxy- and vinyl resin with outstanding adhesion properties and durability. Can be recoated with many one- and two-component products. Suitable for use above and below the waterline in an epoxy system or directly on bare fibreglass. This primer should not be sanded. Mixing ratio: 90 parts comp. A to 10 parts comp. B by weight. Potlife after mixing is 8 hours at 18°C.

Thinner: All applications - Epifanes Thinner D-601

Recoatable: After minimal 4 hours at 18°C. Maximum time unlimited.

Coverage: 750 grs. is sufficient for 8 sq meters

Package: 750 grs. Colour: white

NEW



Epifanes Multi Marine Primer / All-in-one-primer

A one-part multi purpose tie-coat or sanding and adhesion primer for above the waterline combining all characteristics of separate substrate primers in one. Epifanes Multi Marine Primer offers excellent adhesion to wood, fibreglass, steel, stainless steel, aluminium, galvanized metal, copper and most other bare or painted substrates. May also be applied on well cured, degreased and coarsely sanded epoxy resin and epoxy filler. As Multi Marine Primer may be top-coated with either one-part or two-part top coats, this very versatile primer is ideal for transitioning between any one or two-part existing finish. Features include exceptional covering capability, high build, good grain filling and corrosion prevention on steel. Do not apply this product below 10°C and do not topcoat with epoxy resin, epoxy filler or epoxy based paint.

Thinner: brush/roller: Epifanes Brushthinner for Paint & Varnish Spray application: Epifanes Spraythinner for Paint & Varnish Drying times at 18°C: Touch dry after 3 hours.

Sandable after 6 hours

Note: secure 10°C. as a minimum application and drying temperature *Recoatable at 18°C:* after 12 hours with one-component products after at least 48 hours with two-component products. Preferably longer.

Note: If multi coats of Multi Marine Primer are applied and a two-component finish is desired, each coat Multi Marine Primer needs to cure for at least 48 hours at constantly 18°C.

Coverage: one liter is sufficient for 8-10 sq metres

Package: 750ml. - 2000 ml. - 4000 ml. Colours: white, grey and redbrown



Werdol Woodprimer (one-component)

A traditional one-component primer based on alkyd resins. For use on bare wood, with good filling, building and covering properties. The appropriate primer for wood in one-component paint systems above the waterline. Recoatable with all Epifanes one-component paints. Suitable for interior and exterior use.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish Recoatable: After 24 hours at 18°C. (65°F.)

Coverage: 750 ml. is sufficient for 8-12 sq metres (85-130 sq. feet)

Package: 750 ml. - 2000 ml. - 4000 ml. Colours: white, grey, black and brown



Epifanes Epigrond Prelacquer (one-component)

A one-component primer and undercoat based on a urethane/alkyd resin. For use in a one-component paint system above the waterline. Provides maximum adhesion on previously painted, and well degreased and sanded one component paint systems. Suitable for interior and exterior use. Recoatable with all Epifanes one-component products

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish

Recoatable: After 24 hours at 18°C. (65°F.)

Coverage: 750 ml. is sufficient for 10 sq metres (110 sq. feet)

Package: 750 ml. - 2000 ml. - 4000 ml.

Colours: white (may be tinted with Epifanes one-component finish of choice)



Epifanes Fibreglassprimer (one component)

A one-component, white primer based on a urethane/alkyd resin with excellent filling and covering properties. For use on bare fibreglass in a one-component system above the waterline. Suitable for interior and exterior use. Recoatable with all Epifanes one-component products.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish

Recoatable: After 24 hours at 18°C. (65°F.)

Coverage: 750 ml. is sufficient for 10 sq metres (110 sq. feet)

Package: 750 ml. - 2000 ml. - 4000 ml.

Colour: white (may be tinted with Epifanes one-component finish of choice)



Werdol Metalprimer (one-component)

A one-component, anti-corrosive primer based on zinc-phosphate and a urethane/alkyd resin. Suitable for use on steel above the waterline in a one-component system. Can be applied directly on degreased and rust free steel surfaces. Can also be used as a maintenance primer on existing one-component primers.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish Spray application - Epifanes Spraythinner for Paint & Varnish

Recoatable: After 12 hours at 18°C. (65°F.)

Coverage: 750 ml. is sufficient for 10 sq metres (110 sq. feet)

Package: 750 ml. - 2000 ml. - 4000 ml.

Colours: white and grey



Epifanes Washprimer AQ (one-component)

A waterbased adhesion primer providing excellent bond to aluminium, zinc coated and galvanized steel surfaces, non-ferro metals, glass and ceramics. For interior and exterior use above and below the waterline. Can be overcoated with all Epifanes one-and two-component products

Thinner: All applications - Water (preferably unthinned)
Recoatable: After 2 hours at 18°C. (65°F.). (max. 48 hours)
Coverage: 1 litre is sufficient for 16 sq metres (175 sq. feet)

Package: 500 ml. - 1000 ml. Colour: Offwhite, cures clear

Storage: Store above freezing and do not store in direct sunlight.

FILLERS



Epifanes Epoxy Filler 1300 (two-component)

A very strong two-component, chemical and water resistant light-weight filler for use in a two-component system. Shrink free, low odour. Suitable for fibreglass, wood, steel, aluminium and concrete above and below the waterline. Mixing ratio 1:1 by volume (by weight: 80 parts Comp. A - 50 parts Comp. B.). Both components should first be mixed separately and then thoroughly together until colour is uniform. Potlife after mixing is 30 to 60 minutes depending on temperature. Do not use under 12°C. (60°F.). Best sandable properties are between 24 and 48 hours. Do not thin this product.

Sandable: After 24 hours at 18°C. (65°F.)

Package: 750 ml. -2000 ml.

Density: 1.3 (mixed)



Epifanes Fibreglassfiller (two-component)

A fast drying, two-component filler suitable for use in one- and two-component paint systems above the waterline for fibreglass and small repairs on steel and aluminium. This filler can be applied in thick layers. Before use, mix well with 2-4% of the reactor from the tube. Potlife after mixing is 5-10 minutes. After cure it is recommended to immediately overcoat this filler with a 15% thinned sealer coat. The sealer coat prevents moisture from entering the filler.

Sandable: After 30 minutes at 18°C. (65°F.)

Package: 500 grs. - 1500 grs.

Color: white and grey Storage: Store cool!



Epifanes Mono-fill (one-component)

An air-drying surfacer for brushfilling of small and round objects where levelling by filling knife is not possible, e.g. (window-)frames, laths and mouldings. Also suitable for quick filling of wood grain. Not to be used for levelling deep irregularities. Stir well prior to use. Old paint coats should be well cleaned, degreased and sanded. Bare substrates should be primed with the appropriate primer. Recoatable with Werdol Woodprimer, Werdol Metalprimer, Epigrond Prelacquer or with 10% thinned one-component paint as undercoat.

Thinner: If necessary, thin with Epifanes Brushthinner for Paint & Varnish Recoatable: After 16 hours at 18°C. (65°F.). (max. 48 hours) Coverage: 750 ml. is sufficient for 3-4 sq metres (175 sq. feet)

Package: 750 ml. Colour: White



Epifanes Combi Filler (one-component)

A traditional one-component knifing filler based on alkyd resins. Suitable for levelling of small irregularities in one-component paint systems for wood or steel above the waterline. Apply in thin layers only (max. 1 mm.)

Sandable: After 24 hours at 18°C. (65°F.) Package: 300 grams. - 800 grams.



UNDERWATERPAINTS

Epifanes Underwaterprimer (one-component)

A bituminous primer reinforced with aluminium providing a tough impermeable film. For the underwaterprotection of wood steel or aluminium.

For touch ups or full treatment prior to the application of antifouling paints. May be overcoated with most types of antifoulings. We recommend to first make a test patch to check the solvent resistance of the Epifanes Underwaterprimer. Antifouling should be applied in full layers without repeated striking. Stir well prior to use.

Thinner: Brush application - Epifanes Brushthinner for Paint & Varnish

Spray application - Epifanes Thinner D-100 *Recoatable:* After 24 hours at 18°C. (65°F.)

Coverage: 750 ml. is sufficient for 10 sq metres (110 sq. feet)

Package: 750 ml. - 2000 ml. - 4000 ml.

Colour: silver/bronze



Epifanes Foul-Away (selfpolishing underwaterpaint)

A copper, tin and boicide-free selfpolishing underwaterpaint. Due to the selfpolishing characteristics of this paint, the bottom will remain smooth, clean and will prevent unnecessary build-up of paint coats. This bottom paint can be applied over well degreased and roughly sanded existing hard antifouling, selfpolishing antifouling or vinyl based antifouling. Suited for use on wood, fibreglass steel, aluminium and for application on a not fully cured epoxy resin (surface still shows sticky) or on Epifanes Interimcoat. Application of three coats (225 microns dry filmthickness) is advised for long-term effectiveness. Allow 18 hours to cure before launching.

Thinner: Preferably unthinned.

Do not thin. If necessary thin with Epifanes Thinner D-100.

Recoatable: After 6 hours at 18°C (65°F.) Coverage: 750ml. is sufficient for 8m²

Package: 750ml.

Colours: white, black, blue, red, redbrown and green

VARIOUS



Epifanes Retarder for Paint & Varnish (stunt oil)

A highly refined oil additive, formulated to extend the wet edge and flowing time of Epifanes one-component paints and varnishes. Do not use with Epifanes Mono-urethane and Epifanes Nautiforte

Package: 500 ml. - 1000 ml.



Epifanes Accelerator for Paint & Varnish

This resin based additive can be used in the traditional one-component, half-synthetic paints and varnishes to speed up the curing process. For exterior use, if not more than 5-7% is added, it will not affect the gloss, longevity properties. For interior use, i.e. on chairs, tables, etc. this product can be added up to 50% to Epifanes Clear Gloss Varnish. Do not use with Epifanes Mono-urethane and Epifanes Nautiforte.

Package: 500ml. - 1000 ml.



Epifanes Easy Flow

Epifanes Easy-Flow is based on a selection of natural oils. The formulation produces a versatile, multi-purpose additive or stand alone coating. Epifanes Easy-Flow can be added to all conventional single part and half-synthetic paints and varnishes to improve the flowing capability in any conditions less than ideal. Ideally suited for paint or varnish application in cold or extra hot conditions.

Epifanes Easy-Flow prevents rust. Easy-Flow has the ability to penetrate existing thin layers of rust through to the steel. Before applying Epifanes Easy-Flow, first remove loose rust. After a drying time of 12-24 hours, the surface coated with Epifanes Easy-Flow can be recoated with the first coat of a rust preventing system like Werdol Metalprimer, to which 5-10% Epifanes Easy-Flow is added. Epifanes Easy-Flow dries initially with a surface tack. This means that the layer is slightly tacky. This creates very good adhesion for subsequent paint coats.



Packages: 500 ml and 1000 ml

Epifanes Fibreglass Prep Cleaner

A special degreaser for optimum preparation of fibreglass surfaces. Removes all wax and oily residues.

Package: 500 ml. - 1000 ml.



Epifanes Brushes

Finest natural, black China Boar bristles, densely set without a plug to provide the greatest holding capacity. The ends are split for optimum softness. Available in round, oval and full style. Old world quality for those who demand the best working tools.

Recoatability in hours

PRODUCT	at 18°C (65°F.)	at 12°C (65°F.)	at 8°C (65°F.)
	at max. 65% rel.	at max. 65% rel.	at max. 65% rel.
	air humidity	lair humidity	air humidity
Epifanes Clear Gloss Varnish	24	36	40
Epifanes Rubbed Effect Varnish	12	18	24
Epifanes Aqua Marine	6	12	18
Epifanes Woodfinish Gloss	24	38	48
Epifanes Woodfinish Matte	12	18	24
Epifanes Rapidcoat + Clear	6	10	18
Epifanes Poly-urethane Clear	24	36	_
Epifanes PP Varnish Extra	2-3	4-5	_
Epifanes Teak-O-Bello	1/2	3/4	1
Epifanes Nautiforte	18	24	30
Epifanes Mono-urethane	24	30	36
Epifanes Yacht Enamel	24	36	42
Epifanes Poly-urethane Colours	24	36	_
Epifanes Nonskid Deckcoating	24	36	48
Epifanes Epoxy Coating HS	16	24	_
Epifanes Epoxy Primer	12	18	_
Epifanes Interimcoat 1-comp.	5 days	_	_
2-comp.	5 days	_	_
Epifanes Washprimer AQ	2	21/2	3
Epifanes Bilge paint	24	36	40
Epifanes Fibreglassprimer	24	36	40
Epifanes Multi Marine Primer 1-co		12	_
	omp. at least 48	at least 72	_
Werdol Woodprimer	24	36	40
Werdol Metalprimer	12	18	20
Epigrond Prelacquer	18	24	30
Epifanes Mono-fill	16	24	30
Epifanes Foul-Away	6 24	12 36	18 40
Epifanes Underwaterprimer	24	30	40
Sandability in hou	rs		
Epifanes Epoxy Filler 1300	24	48	_
Epifanes Epoxy Finishing Filler	24	48	_
Epifanes Fibreglassfiller	1/2 - 1	1-11/2	_
Epifanes Combi Filler	24	36	48



Epifanes Seapower World's best cleaning products



- The number one product in the Seapower range
- A one-step cleaner and wax
- Easy to apply
- Maximum protection



Epifanes Seapower Cleaner and Wax

A one step cleaner containing the finest Carnauba wax. Easy to apply and provides maximum protection for several months. It removes surface-oxidation, dirt and water stripes. Cleans and protects the surface in one single application, leaving a high gloss finish. Contains "UV blockers" and a limited quantity of silicone

Packing: 500ml - 1000ml - 5000ml



Epifanes Seapower Super Poly Boat Wax

The ultimate "Sun block" for your boat made from 100% pure Carnauba wax providing maximum protection to all polyester, painted and varnished surfaces and metal for a complete season. This "once a year" wax is easy to apply and hard enough to be water and weather resistant. Advanced "UV blockers" provide additional protection, 100% silicon free.

Packing: 500ml



Epifanes Seapower Wash 'n' Wax Boat Soap

Probably the most suitable product available on the market, for washing boats, cars or mobile homes on a regular base. Unlike most other soaps it does not dissolve the existing protective wax layers. Leaves the surface with a clean and stripe-free finish. Epifanes Seapower Boat Soap is biologically degradable, PH-neutral and can be used on all types of surfaces, including one and two-component paintwork and varnishes, polyester, metals, rubber and wood, 100% silicone free.

Packing: 500ml - 5000ml.



Epifanes Seapower Color Restorer

Epifanes Seapower Color Restorer is ideal for bringing back the original gelcoat colour and gloss without damaging it. It easily removes major oxidation, deposits and any dinginess. Even dark coloured polyester gelcoat ends up looking like new, 100% silicone free.

Packing: 500ml



Epifanes Seapower Inflatable Boat Cleaner

This formula has been specially developed for cleaning and maintaining all butyl, hypalon, rubber and vinyl boats and surfaces. It slows down the ageing process and removes deep-seated dirt and marks from tar, diesel oil and soles of shoes. It is also excellent for cleaning fenders and ensures that the surface does not become sticky in the sun, reduces the squeezing noise created by the fender rubbing against the hull, 100% silicone free.

Packing: 500ml

Common problems

The paint does not dry thoroughly

The temperature is too cool for good flow, there is not enough air circulation or too thick a layer has been applied. Applying too thick a coat may entrape solvents in the paint. Drying problems can also occur by applying a one-component product directly on a 'too fresh' epoxy or fibreglass coat. The required amount of time for thorough-drying depends on the amount of solvents remaining in the original coat. In some cases throrough drying may not occur at all. These coats must be removed.

The coat has developed wrinkles

Wrinkling of paint coats may be caused by the application of too thick a layer (often on horizontal surfaces), applying a fresh coat on a surface not yet thoroughly dry or application in direct sunlight. The entrapped solvents may, in time, evaporate through the original layer of paint. If necessary, this can be encouraged by lightly sanding the wrinkled surface, letting air into the paint layer allowing it to dry. When the paint coat has dried, sand to a fresh surface and recoat.

