

Solvent Free Epoxy Floor Coating



Description

This is a two-component, amine cured solvent-free epoxy coating for heavy traffic purpose. It is a self smoothing, easy to apply product, leaving a seamless surface. It has excellent chemical, abrasion and impact resistance. If enhanced slip resistance is required, Happilac Anti-slip aggregate can be used in the system. Can be applied directly in two coats or on approved primers depending on the conditions of the concrete substrate.

RECOMMENDED USE

Designed to protect concrete substrates in heavy-duty areas such as factories, manufacturing, warehousing, airfield workshops, food production, medical laboratory and car parks with heavy traffic in special areas as ramps, turning circles and parking bays. Specially suitable for areas with heavy forklift traffic.

FEATURES

- Outstanding mechanical properties
- High abrasion and chemical resistance
- Low odor – Hygienic product
- Can be applied to a smooth glossy or slip-resistant finish
- Available in a wide range of colours

CERTIFICATES/APPROVALS

Tested and approved as Happilac Solvent Free Epoxy Floor Coatings.

Additional certificates and approvals may be available on request.

Chemical Resistance	Method	Result
Distilled water (cold & hot) Ethyl Alcohol (50%vol) Vinegar (3% acetic acid) Alkali solution (5%) Soap solution Detergent solution	ASTM D1308	No discoloration, change in gloss, blistering, softening, swelling, loss of adhesion or special phenomena was observed

AVAILABILITY

Available in 4L, 20L. (Packing may vary from country to country depending on local requirements).

PHYSICAL CONSTANTS*

Colors/Shade No(s).	According to Happilac Color Card	Flash Point	>96°C
Finish	Glossy	Specific Gravity	1.4 ± 0.03 gm/cm ³
Volume Solids %	98 ± 2%	Dry to Touch	2-3 hours at 25°C
Theoretical Spreading Rate	8-10 m ² /litre/coat	Initial Hardness	24 hours at 25°C
	100 microns DFT**	Fully Cured	7 day(s), 25°C/80°F

*The physical constants stated are nominal data according to the Happilac's approved formulas. They are subject to normal manufacturing tolerances.

**The theoretical spreading rate has been calculated for the stated volume solids and dry film thickness. A practical spreading rate will depend on the actual dry film thickness, the nature of the substrate and relevant consumption factor.

APPLICATION DETAILS

Mixing Ratio	Base: Hardener (3:1 by volume)		
Application Method	Air/Airless spray, Brush, Roller		
Thinner (Max. Vol.)	Do not dilute		
Induction Time	3 minutes at 25°C		
Pot Life	20 minutes at 25°C Reduced at higher temperature		
Nozzle Orifice	0.017 - 0.021"		
Nozzle Pressure	150 - 200 bar [2175 psi] (Airless spray data are indicative and subject to adjustment)		
Cleaning of Tools	Happilac Epoxy Thinner		
Recommended Film Thickness, Dry	2 x 150 microns or 2 x 300 microns depending on application method		
Recommended Film Thickness, Wet	2 x 160 microns or 2 x 320 microns depending on application method		
Overcoat Interval (Min.)	48 hours at 10°C	24 hours at 25°C	12 hours at 40°C
Overcoat Interval (Max.)	6 days at 10°C	72 hours at 25°C	36 hours at 40°C

TYPICAL PAINT SYSTEM

Surface	Preparation	System	Dry Film Thickness
Concrete	Mechanical Surface Preparation	Happilac Solvent Free Floor Epoxy Primer	1 x 100 µm (DFT)
		Happilac Solvent Free Epoxy Floor Coating	1 x 150 µm (DFT)

SURFACE PREPARATION: The surface (new or existing) should be stable, firm, dry and free from dust, sand, loose old paint, laitance, dirt, grease and oil. Proper surface preparation is a must, mechanical surface preparation is highly recommended (see Happilac Surface Preparation Profile) or consult our technical representatives.

SUBSTRATES: Concrete.

PAINT QUANTITY ESTIMATION: While estimating paint quantity for a project, paint losses due to shape of job, surface profile and application technique must be considered.

APPLICATION CONDITIONS: Application can only proceed at temperatures above 10°C, and relative humidity below 75%. Concrete substrate must be at least 28 days old & moisture content must be maximum 4%. Drying data are given on the assumption that proper ventilation is provided.

FILLING: Happilac Solvent Free Floor Epoxy Repair Putty. Recommendation: Apply Happilac Solvent Free Floor Epoxy Primer prior to the application of a specified filler.

APPLICATION: Happilac Solvent Free Epoxy Floor Coating is a two component material (base and curing agent), which must be mixed together to uniform consistence 3 parts base with 1 part hardener by volume. Stir the base continuously while adding the contents of the curing agent. Freshly mixed material must not be added to material which has been in use for some time. Rate of cure is dependent upon temperature.

BRUSH: Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness.

ROLLER: May be used. However when using roller application care must be taken to apply sufficient material in order to achieve the specified dry film thickness.

CONVENTIONAL SPRAY: Do not dilute the paint during normal spraying.

AIRLESS SPRAY: Standard equipment such as Graco, Hemax, Binks or others using a 28:1 or 30:1 pump ratio, an airless tip of 375-450 micrometers (0.017 - 0.021"). Use air driven agitator to maintain mixing.

CLEANING: Clean up all equipment with Happilac Epoxy Thinner immediately after use.

SHELF-LIFE: 10 months from date of production.

STORAGE & HANDLING: Product must be stored as per local regulation. Keep in dry and ventilated location, far from heat and direct sunlight.

SAFETY PRECAUTIONS: Handle with care before and during usage. Read all labels on packaging and paint containers before usage, consult Happilac Paints for any inquiries. Material Safety Data Sheets follows all local and national safety regulation. Avoid inhalation; avoid contact with eyes and skin. Do not swallow. Take precautions against possible risks of fire or explosion. Apply only in well ventilated areas. Remember to protect the environment.

DISCLAIMER: All information contained in this Data Sheet is as accurate and up-to-date as possible. Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Products can be expected to perform as indicated in this Data Sheet, so long as applications and application procedures are as recommended. However there are no expressed or implied warranties other than those implied mandatorily by state. Product data are subject to change without notice and it is the user's responsibility to check with Happilac Paints for the latest version of this Data Sheet.