SINGLE SHOT
100% SOLIDS EPOXY

TECHNICAL DATA SHEET

DESCRIPTION:
SINGLE SHOT is the perfect choice for a flawless finish. Offering excellent aesthetic appeal and proven durability, this two-component epoxy coating system delivers stellar performance without any solvents needed!

ADVANTAGES:
Our surface coating offers optimal protection against moisture and bacteria, while also making it easy to clean. It features an impressive adhesive quality, allowing multiple layers of application with excellent adhesion qualities as well - without any solvents! Plus, the VOC content is extremely low (75.4 g/L), so you can feel safe when applying the product indoors without inflicting harm on yourself or your environment through strong odors.

SURFACE PREPARATION:

OLD CONCRETE:
To ensure maximum adhesion of your product, we suggest starting with a thorough surface cleaning. BLASTRAC, sandblasting or water blasting are all excellent options for eliminating unwanted contaminants and oils/fats; depending on the job you may also require an acid-etching procedure followed by rinsing to open up the concrete's pores and absorb primer more efficiently. SINGLE SHOT is great for a variety of surfaces, but it's important to check the environment before applying - this includes assessing chloride levels, moisture content, and pH balance. For optimal results, we recommend pre-treating with an appropriate primer each time!

NEW CONCRETE:
To ensure the highest level of durability and strength, concrete must cure for a minimum of 30 days before any additional work can begin. Compression resistance should be no less than 25 Megapascals (3625 pounds per inch2), with traction resistance reaching at least 1.5 Megapascals (218 lbs/in2) within 28 days. To ensure superior results, BLASTRAC sandblasting along with diamond grinding or acid etching are necessary to remove post-curing surface laitance. After these procedures have been completed, a thorough rinse is required for finalization. A primer is essential for achieving optimal performance, as it reduces out-gassing and increases the overall adhesion of a substrate.

MIXING:
Ensure that materials are pre-heated before use for optimal results. Carefully blend component B with component A in the precise 2A:1B ratio by volume and mix them using a drill at low revolutions of 300 - 450 rpm, stirring continuously for one minute or more to ensure thoroughness and eliminate air pockets. To guarantee an even blend, ensure to scrape the container walls and bottom during preparation; only generate quantities that can be worked with promptly.

APPLICATION:
To ensure the best results, evenly spread a thin mixed product film on your surface using a rubber rake and roll for full coverage. Take care to prevent any puddling from occurring.

TECHNICAL DATA SHEET

TECHNICAL DATA

PACKAGING	3 US gal (11.35L)		
COLOR	PART A: Clear PART B: Clear to amber		
RECOMMENDED THICKNESS	PRIMER (SINGLE SHOT)	FINISH COAT (SINGLE SHOT)	
SOLID COLOR	10 mils (150 ft²/gal)	16 mils (100 ft²/gal)	
FLAKES SYSTEM	10 mils (150 ft²/gal)	13 mils (120 ft²/gal)	
METALLIC SYSTEM	10 mils (150 ft²/gal)	40 mils (40 ft²/gal)	
SHELF LIFE	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.		
MIX RATIO, BY VOLUME	A:B =2:1		
MIX RATIO, BY WEIGHT	Clear: A:B =100:41–48 Colors: A:B =100:39–45 With quartz sand : A:B =100:50 Mixture =200		
POT LIFE 16 OZ (454 G)	10–15minutes @ 77°F (25°C)		
WORKING TIME	40 minutes		
VOC	75.4 g/L		

PROPERTIES @ 73°F (23C) & 50% R.H.

SOLIDS CONTENT, BY VOLUME	100%			
SOLIDS CONTENT, BY WEIGHT	100%			
DENSITY (KG/L)	PART A	PART B	MIX	
CLEAR	1.05 – 1.10	0.9 – 1.0	–	
COLORS	1.10 – 1.15	0.9 – 1.0	–	
THINNER RECOMMENDED	Xylene			
WAITING TIME/ OVERCOAT-ABILITY	SUBSTRATE TEMPERATURE	MINIMUM	MAXIMUM	
BEFORE APPLYING SINGLE SHOT OVER PRIMER	>50°F (10°C)	24 hours	3 days	
	>68°F (20°C)	12 hours	2 days	
	>86°F (30°C)	6 hours	1 day	
BEFORE APPLYING SECOND COAT OF SINGLE SHOT	>50°F (10°C)	30 hours	3 days	
	>68°F (20°C)	24 hours	2 days	
	>86°F (30°C)	16 hours	1 day	
CURING DETAILS	SUBSTRATE TEMPERATURE	FOOT TRAFFIC	LIGHT TRAFFIC	FULL CURE
	>50°F (10°C)	30 hours	5 days	10 days
	>68°F (20°C)	24 hours	3 days	7 days
	>86°F (30°C)	16 hours	2 days	5 days
SERVICE TEMPERATURE	-4°F to 122°F (-20°C to 50°C)			

PROPERTIES @ 73°F (23C) & 50% R.H.

BOND RESISTANCE (PSI), ASTM D4541	>300 (substrate ruptures)		
PERMEABILITY (%), ASTM D570	0.3%		
HARDNESS (SHORE D), ASTM D2240	85-90		
ABRASIVE RESISTANCE, ASTM D4060 (CS17 / 1000 CYCLES / 1000 G)	0.10 g		
VISCOSITY @ 77°F (25°C)	PART A	PART B	MIX
CLEAR	1200-1400	150-350	600-800
COLORS	1400-1600	150-350	1200-1400
TENSILE STRENGTH (PSI), ASTM D638	5500		
COMPRESSIVE STRENGTH (PSI), ASTM D695	14000		
FLAMMABILITY	Class I (Not considered Flammable, Flash Point >199.4°F (93°C)		
ELONGATION (%), ASTM D638	6.7		
RESISTANCE TO MOLD GROWTH, ASTM D3273	Rated 10 (highest resistance)		
RESISTANCE TO FUNGI GROWTH, ASTM G21	Rated 0 (no growth)		

CLEANING:

Before starting your project, make sure to prep every tool and material with the appropriate cleaner/thinner for epoxies. To protect yourself as well, don't forget to properly wash off any residue on your skin or hands after handling the product - a warm soap solution should do the trick! After it hardens though, only mechanical methods can help you remove hardened epoxy from surfaces.

RESTRICTIONS:

When applying the coating, substrate temperatures should remain at a range of 50 to 86°F (10 - 30°C). During application and curing processes, relative humidity must stay below 85%. Moreover, be sure that the ambient temperature is 5.5°F (3 °C) more than dew point readings for best results; additionally, make certain that moisture content on substrates does not exceed 4% before finishing with the coating layer. Ensure your substrates are prepped and dry for optimal application results! For external applications, keep them out of reach from ground levels to avoid exposure risk. Plus, during the first 24 hours post-application be mindful of any humidity or condensation - this can cause discoloration if exposed to long-term ultraviolet light.

HEALTH & SAFETY:

Prevent potential harm to your skin, eyes, and respiratory system with these precautionary steps: In case of contact on the surface of the body, wash promptly with water and soap. If irritants enter your sightline, rinse thoroughly for at least 15 minutes then consult a medical professional if any discomfort remains. To ensure healthy breathing capability in troubling scenarios – move toward fresh air as soon as possible while discarding clothing exposed to contamination upon removal before reutilizing them again.

This product should be handled with extreme caution as it contains hazardous ingredients which can cause skin irritation upon contact. Furthermore, direct contact with the eyes and breathing in its vapors may lead to serious burns; therefore safety glasses and chemical-resistant gloves are a must when handling this strong sensitizer.

To ensure your safety while working with organic vapors, NIOSH and MSHA highly recommend using a certified breathing apparatus. Be sure to also assess the workspace for suitable ventilation according to the guidelines specified in the material safety data sheet.

NOTICE:

BallistiX is proud to provide the most accurate information, recommendations, and technical data concerning this specific material. It's important to note that its validity may not be retained if mixed with any other construction elements. BallistiX provides data that should be used with caution; users are responsible for determining its applicability to their own needs and testing it before use. Legally, BallistiX cannot accept liability in cases where the provided data is misused or inaccurate. BallistiX vows to provide full consumer satisfaction, making sure you're taken care of should any issues arise with your product.