



## POLY CLEAR 80 & 100

### 80% OR 100% SOLIDS - POLYASPARTIC ALIPHATIC POLYUREA TECHNICAL DATA & APPLICATION INSTRUCTION

#### PRODUCT DESCRIPTION

**Poly Clear** is a two-component Polyaspartic Aliphatic Polyurea utilizing innovative proprietary nanotechnology. Available in 80% and 100% Solids, it provides a high gloss, clear coating. It's superior penetration and bonding strength can provide years of abrasion, impact and wear resistance. **Poly Clear** provides chemical (splash & spill) resistance and resistance to hot tire pick-up. **Poly Clear** can be used in conjunction with quartz, flake and rubberized aggregate systems.

#### BENEFITS/FEATURES

- Can be tinted, pigmented
- Interior or Exterior use - UV Stable
- Superior penetration and adhesion
- Excellent long term wear
- Labor saving - quick dry time!
- Excellent for use with Flake
- Quick turnaround time
- Excellent abrasion resistance
- VOC Compliant in most of U.S. and Canada

#### RECOMMENDED APPLICATIONS

- Garages
- Auto Service Centers
- Laboratories
- Cafeterias
- Interior or exterior
- Many other concrete floors where a fast curing, high-performance, high-gloss coating is needed.

#### TECHNICAL INFORMATION

Solids.....	80 - 100%	Wheel Traffic.....	24 hours
<b>Pot Life (80%)</b> .....	<b>10 - 20 min</b>	Dry Appearance.....	Clear and High Gloss
<b>Pot Life (100%)</b> .....	<b>5 - 10 min</b>	VOC Content (80%).....	< 250 g/l
Dry Time (Tack Free).....	2 - 3 hours	VOC Content (100%).....	< 100 g/l
Re-Coat Time.....	2 - 18 hours	Application Temp.....	50°F - 80°F
Foot Traffic.....	3 - 4 hours		

*\*\*Information above is based on lab temperatures of 70°F - 72°F @ 50% RH. Using this product outside of those conditions will affect the accuracy of the above data.*

#### SPECIFICATIONS/COMPLIANCES

Meets OTC, CARB, LADCO, VOC restrictions. Dried Coating is USDA accepted.

#### APPROXIMATE COVERAGE RATES *(vary depending upon surface porosity, texture and application technique)*

##### Poly Clear 80

First Coat (direct to concrete) ..... 200 - 300 sq ft / gallon  
 Second Coat (over existing coating) ..... 250 - 350 sq ft / gallon  
 Over Media Broadcast ..... 175 - 225 sq ft / gallon

##### Poly Clear 100

First Coat (direct to concrete) ..... 100 - 250 sq ft / gallon  
 Second Coat (over existing coating) ..... 125 - 275 sq ft / gallon  
 Over Media Broadcast ..... 100 - 200 sq ft / gallon

#### SHELF LIFE & PACKAGING

**Poly Clear** has a shelf life of up to 12 months in it's original, sealed, unopened containers. **Poly Clear** is packaged in 2 gallon and 10 gallon kits.

#### CLEAN-UP & PRODUCT REMOVAL

Use Xylene. Dispose of containers in accordance with local and federal regulations. Dried, cured material may be removed with a commercial paint stripper such as *Kingdom Products Nock-Off* or by using a diamond grinding, sandblasting or similar mechanical action.

**MOISTURE TESTING:** Concrete floors, especially those not poured over a proper vapor barrier, are subject to possible moisture vapor transmission which may result in bubbling and/or failure of high performance coatings. Basic moisture testing can be performed by placing a 4' x 4' sheet of plastic on the concrete surface and securely taping it down on all edges. If after 24 hours the concrete is still dry below the plastic, the surface should be ready to coat. If any moisture is present, perform a calcium chloride and relative humidity probe to determine if excessive levels of vapor emissions are present before applying any coatings.

**SURFACE PREPARATION/RECOATING:** Concrete must be cured 28 days and it must be deemed structurally sound and completely clean and dry. Substrate, air and material temperature must be between 50°F and 80°F. If applied outside of these limits the coating may not achieve adequate film formation and may have excessive air entrapment, bubbles, blushing or hazing. Higher temperatures and excessive humidity will speed the cure rate of the product and cooler temperatures and lower humidity will slow it down. It is recommended to prepare the concrete surface by mechanical means such as shot blasting or diamond grinding with 30 grit or coarser diamonds to achieve a CSP-2 to CSP-3 profile. Vacuum concrete surface several times until dust thoroughly removed. If applying over an existing, fully bonded coating that is outside its recommended recoat window, the surface should be sanded thoroughly with a 60-120 grit sanding screen until the surface is completely dulled with scratches. Vacuum dust thoroughly, rinse clean and remove excess water with a wet/dry vacuum or floor scrubber. Allow surface to dry completely prior to application of coating. Where applicable and with adequate ventilation, wipe the surface with pure Acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! Take all safety precautions.

**TINTING:** Use Kingdom Products PolyPack (refer to TDS prior to use) Add 9-16 oz of color per gallon of mixed material. Always add the color to Part A and drill mix for 2-3 minutes prior to blending Part A with Part B. Always test color prior to full application. Multiple coats may be needed for full opacity.

**MIXING:** If mixing less than a full kit, first mix Part A and Part B separately with a stir stick, low speed mixer or vigorously shake the containers, prior to measuring out the smaller amounts, to ensure proper distribution of all ingredients. In a clean mixing container, blend 1 Part A and 1 Part B, using a drill mixer for 2-3 minutes. Avoid creating a vortex which could introduce air and/or moisture into the mixture. Do not mix more than can be applied within the useable pot life time frame. DO NOT THIN!

**APPLICATION: Over Smooth Surfaces** 18" rollers are recommended for any surface to speed application and reduce roller marks. Do not allow to puddle! Use a brush to remove excess coating in joints. It is recommended to work in sections, using control joints as dividers. Apply the mixed material within the useable pot life time frame. If the material becomes thick and sticky, stop using it immediately and discard any unused material. Always keep a wet edge to prevent roller marks.

**POLY CLEAR 80** Using a brush and/or 3/8" nap, shedless roller, dip and roll the mixed material from a roller pan. Start by placing the wet roller at one corner of a 4' x 4' square and roll the material at an angle from the top left of the square to the bottom right, applying no pressure to the roller. Spread that material across that square only and back-roll immediately to even out any roller marks. Adjust the size of your square as needed. After finishing that square, move on repeating the same technique. An airless HVLP sprayer may also be used.

**POLY CLEAR 100** Apply the mixed material by pouring it out onto the surface and spread with a flexible, flat squeegee or a 5 - 12 mil notched squeegee. Back roll using 3/8" nap shedless roller. Use a brush or small roller for corners and areas hard to maneuver longer squeegees/rollers.

**Over Flake** Apply the mixed material directly over the flake and spread evenly with a flat, flexible squeegee and back-roll using a 3/8" nap, shedless, phenolic core roller, always filling the rolling cover before beginning to back roll. Do not allow to puddle! Use a brush to remove excess coating in joints. An airless HVLP sprayer may also be used.

## PRECAUTIONS AND LIMITATIONS

- **Poly Clear** will not freeze during storage, however, allow temperature to rise to 50°F prior to application.
- All HVAC ventilation ducts should be somehow blocked prior to application so solvents fumes are not distributed.
- If using indoor, use proper ventilation while applying and for hours after application to ensure fumes are removed.
- It is not recommended to apply product over carpet, tile or other type of floor adhesives.
- This product performs best when applied as one or two thin coats, NOT one heavy coat. This product is more susceptible to bubbling and failure when applied too heavy or allowed to puddle. Follow recommended coverage rates and do not allow to puddle.
- Please be aware that this cured product, may be slippery when wet. Consider the addition of *Grip-Fine* anti-skid.
- All new concrete must be cured 28 days prior to application of **Poly Clear**.
- It is not recommended to thin this product. Improper thinning may cause delamination in a short time frame.
- This product may darken the surface of many new and existing concrete slabs. Test Prior To Use.
- Solvent vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge or other sources of ignition located at a distance from the material handling point.

## SPECIAL NOTES

Please consult Safety Data Sheet (SDS) and read Warranty information prior to use. **For Professional Use Only!**  
Always verify that you are using the most current (TDS) Technical Data Sheet.