Water based PUD recommendations for Sports timber courts & other parquet type Wooden flooring.

Kamsons range of resins cater for sports floor stadiums such as basketball courts and college/high school gymnasiums as well as domestic timber floor coatings for the average home. Our preferred resin for sports floor applications is based on our range of PU Hybrids & Pure PU resins for wood floor coatings

We recommend a PU Hybrid resin called Kamthane 2833. This is an aromatic hybrid water based polyurethane dispersion (for interior only) which displays outstanding abrasion and chemical resistance. It is used extensively to coat sports floors and based on its free hydroxyl groups along its backbone,Kamthane 2833 can be easily cross linked with an aziridine cross linker (recommended) or other types to achieve a greater toughness and chemical resistance. Attached are some pictures of some basketball courts in Melbourne that were coated with a coating comprised of Kamthane 2833 (Image 0169, 0171, 0172). This resin attains a good degree of gloss and can be applied over a number of different timbers. It is highly advisable that new timbers are allowed to weather outside for 6 weeks prior to coating with Kamthane 2833 to allow the timber to expel its natural oils and tannin's. Thesetannin's can interfere with coating adhesion. This resin may not suitable for courts comprised of spring loaded sports floors as excessive floor movement can cause hair line cracking in the coating, but saying that the flexibility of this resin is > 200%. This type of formulated resin is well suited & being currently used in Australia/NZ for basketball courts

See picture above of an interior timber floors based on Kamthane K-2833.This formulation we have achieved with K-2833 is easily sandable in a short period for a second coat. Adhesion of the Kamthane 2833 to timber floors formerly coated with oil/alkyd based stains/coatings are not problem if the floors are prepared accordingly. Mainly:

1. Floors are cut back/sanded with a coarse 80 grit sand paper. As much remnants of the oil/aged alkyd should be removed by this process. Normally, removing the top 0.2-0.5 mm layer of timber should be ample. This will ensure that the timber floor underneath is consistent.

2. Repeat the sanding process with a finer grade of sandpaper such as a 100-120 grit to ensure scratches and grain raise are removed from the timber floor. Ensure sanding is done in the same direction as the timber grain. Any coating applied over such scratches will amplify the scratches on the floor. Ensure the floor is vacuumed then mop moistened to remove any dust.

3. Apply the first coat of Kamthane 2833 coating with a drag tool/weighted T bar at a rate of 14-18m2/litre.

4. After drying 4-6 hours later, apply a second coat using the same implement. To achieve the correct application rate, the coating should be formulated at a viscosity of between 22-25 seconds in a B4 Ford Cup at 25 degrees celcius.

5.Ensure traffic is only light the following day with full cure after 7 days.

Our more robust interior and exterior lacquer to a degree is the water based pure aliphatic polyurethane resin called Kamthane 164 PP which is an aliphatic non yellowing dispersion. This PUD is especially designed where you require a high gloss level similar to solvent based coatings with a high degree of clarity. Coatings comprising this resin display very high 'toughness' yet are very flexible. Applications include coating parquetry and timber floors made from all types of timber.