POLYURETHANE CLEAR LACQUER (FOR WOOD)

ISO Cyanate Cured Lacquer

PU 02

- HIGH GLOSS LACQUER-EXCELLENT GLOSS RETENTION ON EXTERIOR & INTERIOR EXPOSURES
- OUTSTANDING MAR RESISTANCE-RECOMMENDED AS ABRASION RESISTANT FINISH
- OIL FREES RESISTANT TO CHEMICAL YELLOWING AND YELLOWING IN DARK.
- EASY APPLICATION: CAN BE APPLIED BY BRUSH, ROLLER OR SPRAY

USES: Polyurethane Lacquer has high chemical resistance and is particularly suited to wood surfaces. It is a versatile coating with excellent gloss retention and is easily applicable by brush, roller or spray.

RESISTANCE GUIDE:

HEAT RESISTANCE:	Upto 120°C (Dry)	ALKALIES:	Good resistance to splash and spillage of most common alkalies.
WEATHERABILITY:	Excellent	SALTS:	Unaffected by splash and spillage of most salt solutions.
SOLVENTS:	Unaffected by splash and spillage of common alcohols, aliphatic and aromatic hydrocarbons, esters and ketones.	WATER:	Excellent resistance to fresh and salt but not recommended for immersion.
		ABRASION:	Excellent.
ACIDS:	Suitable for mild exposure to Inorganic acids.	TOXICITY:	Paint is cured with cyanate hardener. Though dry film is not harmful but should not be used in or near food items.

TYPICAL PROPERTIES AND APPLICATION DATA:

CLASSIFICATION:	Polyurethane coating	DRY FILM PER COAT:	(30-40) Micrometers
FINISH:	Gloss		
COLOUR REFERENCE:	Transparent	NUMBER OF COATS:	Two – Three
		DRYING TIME AT 25°C AND 50% HUMIDITY	MIN / MAX
COMPONENTS:	Two	TOUCH	2 hours
		HANDLE	16 hours
		RECOAT	8 hours
		FULL CURE	48 hours / 7 days
VOLUME SOLIDS:	43+-4%(Vary with colour)		
S.GRAVITY:	1.30+-0.05		
FLASH POINT:	23°C (mixed)		
		SUITABLE SUBSTRATES:	Suitably primed timber.
THINNER	Thinner For PU		
SHELF LIFE:	06 months min		
POT LIFE:	8 Hours at 25°C for 4 litres.	APPLICATION METHODS:	Brush, roller air or airless spray.
MIXING RATIO:	Parts A 4 (By volume.) Parts B 1		
LINE/SHADE:	PART A: 424- PART B: 275-		

THEORETICAL SPREADING RATE AT RECOMMENDED DRY FILM THICKNESS

A spreading rate of (10-14) m^2/litre corresponds to (30-40) micrometers dry film thickness assuming no losses on a non-porous and non-absorbent surface.
Practical spreading rates will vary depending on such factors as methods, conditions of application and surface roughness.

POLYURETHANE CLEAR LACQUER TWO PACK

TYPICAL APPLICATION SPECIFICATION

SURFACE PREPARATION: Polyurethane Lacquer is a specialised chemical resistant finish and requires sound preparation and a suitable priming system to perform to its optimum. It is recommended that potential specifiers follow guidelines for surface preparation from the Date Sheet for the primer system selected.

APPLICATION: Stir each component thoroughly before mixing. Add Comp. B to Comp. A in the ratio supplied and mix until uniform in colour and consistency. Allow to digest for 20 mins before application.

ROLLER/BRUSH: As this material tends to set up quickely, application should be made with minimum of crossing or laying off.

CONVENTIONAL SPRAY: Thin up to 10-20% per litre with Thinner for PU mixing thoroughly before application.

TYPICAL SET-UP

De Vilbiss JGA 502 Gun: 704 Air Cap. FF Fluid Tip, FF Needle

Iwata W70 Gun: 021 Air Cap; 021 fluid Needle; 021 Fluid Nozzle

Pressure at Pot: 10-15 p.s.i.

Pressure at Gun: 55-60 p.s.i.

AIRLESS SPRAY: Standard airless spray equipment such as Graco, Hermex, Binks and others using a 28:1 pump ratio, with a fluid tip of 475 micrometers (019") and an air supply of 80-100p.s.i. Thin if necessary with up to 100 ml per litre.

OTHERS: Freshly mixed material must not be added to material which has been in use for sometime. Ensure you read and understand safety precautions on data sheet. Never add thinner other than recommended. Do not apply polyurethane finish at temperature below 10°C or relative humidities above 85%. Maximum recoat intervals 48 hours at 25°C should this time interval be exceeded the surface must be lightly abraded.

CLEAN UP: Clean up all equipment with Urethane Thinner immediately after use.

RECOATING AGED COATING Abrade surface, clean from dust and foreign matter. Apply further coat of Polyurethane lacquer to specified thickness.

RECOMMENDED HEALTH & HYGIENE GUIDELINES FOR HANDLING PAINT PRODUCTS CONTAINING ISOCYANATES

THESE PRECAUTIONS These guidelines relate to those two pack paint systems, one part of which is a base colour MUST BE READ BEFORE USE: free of is ocyanates and other an is ocyanate hardener.

TOXICITY SUMMARY: In general, the base colours used in such paints are no more toxic or irritant than other commonly used paints containing organic solvents. However, both the hardener and the mixture of hardener and base will contain free organic is ocyanates and must be handled using the protective clothing, equipment and handling procedure set out in these guidelines. Organic is ocyanates themselves are mild skin irritants although rarely skin sensitisers. They are severe eye irritant and cause chemical conjunctivitis. They are also known to be respiratory irritants which, if inhaled at sufficiently high concentrations, can produce symptoms of dry throat and cough. In more severe cases, asthmatic breathing and chest tightening may occur, but there is usually a rapid recovery when exposure ceases. There may be a delay period of several hours after contract before symptoms appear. Susceptible works may become sensitised by exposure to is ocyanates and subsequently exhibit symptoms of distress when exposed to atmospheric concentrations well below the normal industrial hygiene standard. Repeated attacks may lead to permanent respiratory disability.

PERSONNEL Persons with a history of asthma or other respiratory problems or known to be sensitive to is ocyanates should not be engaged in any work involving the handling of is ocyanates. Spray painters who handle such products should be made aware of this fact.

OPERATOR PROTECTIVE CLOTHING &EQUIPMENT: All mixing and handling of hardener, and mixed paint, is to be carried out under working conditions that prevent skin contact or inhalation of vapours. For example, wear impervious gloves in ventilated booth which is fitted with an effective, filtered exhaust system. Wear a positive-pressure, air supplied, full-face respirator, and wear gloves while spraying, during all subsequent use. Dust respirator must not be relied on any time to give protection from is ocyanate paint Spray mist.

HANDLING: Containers must be kept tightly closed when not in use and not be allowed to come into contact with water at any time. Isocyanates react with water, which destroys their effectiveness. Gas is evolved when isocyanate reacts with water. If a closed container shows signs of internal pressure, cover it completely with a cloth and remove the lid slowly to prevent splashing or expulsion of the lid. If using only a portion of the hardener in a can seal and use the balance of contents within 36 hours, as it will deteriorate on exposure to air. Store away from heat and moisture. Accidental spillage should be absorbed into dry sand or earth, remove from the work area cover with water for 24 hours. Do not allow materials of this kind to enter drains. Dispose of treated waste as directed by the relevant waste disposal authorities. Fill empty hardener containers with water for 24 hours.

APPLICATION: If applying by brush or roller all mixing and application must be carried out under well ventilated conditions that prevent inhalation of vapours. It's spray application should be carried out in a spray booth fitted with an effective filtered exhaust system. The operator must wear the protective equipment prescribed in these guidelines.

FLAMMABILITY: Polyurethane Finishes are highly flammable. All sources of ignition must be eliminated, in or near the working area. DO NOT SMOKE. Fight fire with foam, CO_2 and dry chemical powder. On burning will emit toxic fumes.

WELDING: Avoid inhalation of fumes if welding surfaces coated with this paint. Grind off coating before welding.

EMERGENCY TREATMENT:

EYES: Irrigate with copious quantities of water for fifteen minutes. Seek medical assistance if effect persists.

SKIN: Remove paint using proprietary industrial skin cleanser. Wash skin thoroughly with soap and water. Remove contaminated clothing and wash before re-use. If irritation occurs seek medical advice.

INHALATION: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume the most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

INGESTION: Seek immediate medical assistance. Do not induce vomiting.

PACKING: Available in 4 litres packs (Comp. A in 3.2 Ltrs and Comp. B in 0.8 Ltrs)

All information contained in this Data Sheet is as accurate and up-to-date as possible. Products can be expected to perform as indicated in this Sheet, so long as applications and application procedures are as recommended. However there are no expressed or implied warranties other than those implied mandatory by State.