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351NF Technical Data Sheet 2008

1. PRODUCT SUMMARY

- Cadre 351NF is a high quality hot melt adhesive for edgebanding, suitable for straight edging and soft forming, conforming to BS6250 Part 3, 1991.
  The product is a general purpose edgebanding grade with good working and adhesive properties.
  Cadre 351NF is characterised by a medium low viscosity and high tack, and is therefore ideal for a wide range of differing edge material.
  Cadre 351NF is also particularly suited for the pre-coating of edging tape.

2. STORAGE

- The product should be stored in a cool dry place for up to 5 years

3. PACKAGING

- 20kg sacks

No liability is accepted for any loss or damage arising directly or indirectly from the use of the Company's products. Prospective users should therefore satisfy themselves by appropriate trials that the product to be used is suitable for the intended use.
Purchase of this product is subject to the Terms & Conditions detailed in our Terms of Business – a copy is available on request).

4. SUGGESTION FOR USE

- Cadre 351NF must be spread in a uniform and continuous coat, with a glue thickness that is suitable for the materials to be bonded.
  Porous substrates require a higher glue coat, whilst thin edging material requires a lower coat to avoid telegraphing problems on the surface to the edge.
  To avoid irregular glue spread, and consequently bonding defects, regular checks should be made to ensure the glue roller is perfectly parallel with the panel edge.
  The quantity of the glue spread will regulate the open time of the adhesive - the higher the spread of the glue the longer the open time, and vice versa.
  The track speed should not normally be lower than 15m/min, however see previous section under Optimal Conditions of Use.
  Low speeds may cause bonding problems due to the cooling of the adhesive. It is therefore recommended that if slower speeds are required use a heavier glue spread to increase the open time. The use of hot air blowers on the glue line will also improve wettability of the adhesive.
  The use of a primer will improve adhesion on difficult edges such as solid wood lippings. However, before applying the hot melt ensure that all the solvent in the primer is first flashed off.
  Different edging materials perform in different ways. Before changing materials it is recommended that the adhesion is carefully checked. The heat resistance of the bonded material is strongly influenced by the characteristics of the edging material itself.
  If the edgebander is stopped temporarily, reduce the temperature in the hot melt pot by approx. 30-40°C to avoid oxidation problems and the formation of a crust on the surface of the glue.
  Cadre hot melt adhesives offer good heat resistance. However, many factors can effect this, so tests should be carried out to determine the heat resistance and, in each case to satisfy yourself as to its suitability.
  Adhesive tanks and applicators should be thoroughly cleaned from time to time to prevent the build up around these areas. This build up could result in hot spots, or inaccurate temperature readouts. The tank will contain residue at the end of working, which needs to be removed regularly. The tank sides should also be cleaned to remove any encrustations which may affect the transfer of heat.
  Ensure there is no dust on the edges - dust can cause defects in gluing as well as imperfect adhesion.
  For Health and Safety information and handling advice please refer to our Safety Data Sheet on this product.
  Cadre 351NF is not required to be marked hazardous. However, even at correct working temperatures, vapours are released which can cause unpleasant odours. If the given working temperatures are exceeded for a long period of time, the fumes released may irritate the respiratory system and extraction should be used. In addition the adhesive will begin to degrade and cease to be effective.
  If any application conditions or bonding parameters are changed from those when the product was initially recommended to you, you should first check with our Technical Department for suitability.

5. BASE

- EVA Copolymer

6. CHARACTERISTICS

-	Form	Pellets (Prills)
-	Colour	Natural/White/ Brown
-	Viscosity at 220°C and 2.5 RP	
-	(Brookfield RVT and Thermosel) mPas	45,000 - 60,000
-	Melting Point	
-	(Ring and Ball ASTM A28)	°C 93 +/- 2

7. OPTIMAL CONDITIONS OF USE

-	Humidity of materials	%	8 - 12
-	Workplace/ material temperature	°C	18 - 20
-	Adhesive Temperature:		
-	Roller	°C	190 - 210
-	Tank	°C	160 - 180
-	Optimum track speed	m/min	15 - 40
-	Glue Spread	g/m2	180 - 250
-	Pressure on rollers	N/mm2	0.4 - 0.8

For higher speeds than the optimum speed above, and in particular feed speeds of 55 - 60 m/min, we suggest that the temperature on the glue roller and in the hot melt pot, is increased by 4 - 6□C to facilitate quick melting.
As an alternative for higher feed speeds, see other products in our range, such as Cadre 342 and Cadre 342HV.
At speeds lower than 15m/min Cadre 3465 can be used with the aid of other external heating sources such as hot air blowers aimed directly at the glue line before pressure is applied.
When pre-coating wood veneer edge materials, the speed of the pre-coating machines must be adjusted to ensure that after coating, the glue line cools sufficiently to prevent damage to the veneer stitching which could cause problems during edge winding. A cooling tunnel is usually installed after the glue spreader to facilitate higher production speeds