



CEMENTING PROTOCOL

16/04/2018

The protocol is the same in all natural rubber soles, only change the adhesive:

1. Rough followed by halogenation (SOLUCION HALOGENANTE) , minimum drying time, 1 hour.
2. Apply solvent or water based adhesive to the upper and to the sole.
3. Wait till the adhesive dry, about 15-20 min solvent base and 45-60min water based at room temperature that can be accelerate by heat air on an oven.
4. Bond both sides (upper/sole) by heat reactivation about 70°C with 1bar/1min pressure.

ADHESIVES:

1. SOLVENT BASED 2K è PLASTIKOL 553BV + 5%DESMODUR RFE
2. WATER BASE 2K è AQUATAK 3538/UV + 3% RETICULANTE DA
3. WATER BASED 1K è AQUATAK 1K-891/NV3

Attach Technical Data and Safety Data Sheets of each adhesive

Kind Regards

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INSOCO, S.L. ADHESIVOS PARA LA INDUSTRIA
 POLIGONO INDUSTRIAL PLA DE LA VALLONGA (ALICANTE)
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EQUIPO: Maquina de ensayos universales SHIMADZU modelo AGS-X

Fecha de ensayo	10/04/2018	Velocidad de muestreo	100 pto/sg
Identificación Muestra	180410-3	Velocidad de la cruceta	100 mm/min
Nombre del operador	Juan Carlos	Humedad	50+/- 5%
Tipo de Ensayo	Resistencia de la Unión CORTE/PISO	Temperatura	23+/- 2°C
Método de Ensayo	UNE-EN ISO 17708	Envejecimiento	SI (7 Dias a 50°C)

CLIENTE Y PLAZA : LACTEA HEVEA (FRANCIA)
TIPO DE CALZADO : ENSAYOS PARA CALZADO DE CABALLERO
MATERIALES : PISO DE CAUCHO / TACON DE CAUCHO
ADHESIVO EMPLEADO : SE INDICA
CONDICIONES DEL PEGADO : PISO, LIJADO+HALOG /TACON LIJADO+HALOG.P=1Kg-1min

Nombre	Tipo de Fallo	Valor maximo de tensión	Valor medio de tensión	Valor mínimo de tensión
Parametros				
Unidad		kgf/cm	kgf/cm	kgf/cm
1-AQUATAACK 3835-UV+3% RETICULANTE DA	90%A/10%M	8,02	6,35	5,10
2-PLASTIKOL 553BV+5%DESMODUR RFE	100%A	6,77	5,13	3,06

Comentarios:

Los resultados obtenidos son buenos en los tres casos.

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EQUIPO: Maquina de ensayos universales SHIMADZU modelo AGS-X

Fecha de ensayo	28/03/2018	Velocidad de muestreo	100 pto/sg
Identificación Muestra	180328-4	Velocidad de la cruceta	100 mm/min
Nombre del operador	Juan Carlos	Humedad	50+/- 5%
Tipo de Ensayo	Resistencia de la Unión CORTE/PISO	Temperatura	23+/- 2°C
Método de Ensayo	UNE-EN ISO 17708	Envejecimiento	NO

CLIENTE Y PLAZA : LACTEA HEVEA (FRANCIA)
TIPO DE CALZADO : ENSAYOS PARA CALZADO DE CABALLERO
MATERIALES : PISO DE CAUCHO / TACON DE CAUCHO
ADHESIVO EMPLEADO : SE INDICA
CONDICIONES DEL PEGADO : PISO, LIJADO+HALOG /TACON LIJADO+HALOG.P=1Kg-1min

Nombre	Tipo de Fallo	Valor maximo de tensión	Valor medio de tensión	Valor mínimo de tensión
Parametros				
Unidad		kgf/cm	kgf/cm	kgf/cm
1-AQUATAACK 3835-UV+3% RETICULANTE DA	90%A/10%M	8,28	6,76	4,74
2-PLASTIKOL 553BV+5%DESMODUR RFE	100%A	6,32	5,56	4,95

Comentarios:

Los resultados obtenidos son buenos en los tres casos.



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Technical Data Sheet 2016/10

AQUATAACK 1K - 891/NV-UV/3

Aquataack 1K-891/ NV-UV/3 is a one component PU water based adhesive, solvent free. It doesn't need to be mixed with hardener to give heat resistances up to 80-120°, depending on the materials and the shape of the pieces.

It is specifically developed for application with brush or roller.

Product included a tracer to detect the product applied under the Ultraviolet Lamp.

APPLICATION

It is used for the gluing of uppers and soles of the usual materials used in shoes (leather, PVC, PU, Rubber, TR rubber or micro EVA, bio soles, etc...), with the adequate preparation, similar to the one done with solvent based adhesives.

TECHNICAL CHARACTERISTICS

- Brookfield Viscosity RVT (22 +/-2 °C)	4000 a 8000 mPa.s
-Solid content:	50 +/- 1%
-T.M.F.	5°C
-Flash heat activation temperature	70-90° C
-Stability at 20-25°C	6 months
-Pressure	5-6 Kg/cm ²
-Press time	10-15 s.

INSTRUCTIONS FOR USE

The materials must be prepared in the following mode:

Leather soles and uppers, roughening, like traditional. When materials are of difficult penetration it could be necessary to apply some primer. Minimum drying time 30 minutes.

Neolite and moulded rubber, roughening followed by halogenating, minimum drying time 1 hour.

(TR) rubber soles, halogenating, minimum drying times between 2 to 24 hours.

PU and PVC soles, cleaning with DISOLVENTE DIFUMINADOR. In some PU soles roughening could be needed.

BIOS soles, halogenating, minimum drying time 1 hour.

Microporous EVA soles, primer with Insocol Imprimación 3000 + 5% Desmodur RFE.

Gluing with **Aquatack 1K/891/ NV-UV/3**, upper and sole, and introduce it in the bonding line where the drying and the heat activation of both upper and sole is done. Continuedly it must be pressed, with the pressure and time that is normally used with the solvent based adhesives. Normally the forced air drying system (drying oven at 40-50°C), is practically necessary due to the slow evaporation speed of the water compared to the solvents.

Cold contact bonding is not possible with these glues.

Initial and final heat resistance of the cold and hot bonding are equal or superior to the two component adhesives (mixed with 3-5% of hardener); giving the following advantages:

- Mixture not required.
- Very good heat activation properties.
- High heat resistance with addition of hardener.
- It allows the pregluing of the pieces days before its heat activation, as long as they remain at temperatures not over 25-30°C.

Disadvantages:

-It is not recommendable for visible gluing in White or clear coloured material, because they turn yellowish for the influence of light and heat.

-It requires special precautions during storage.

IMPORTANT OBSERVATIONS

Aquatack 1K/891/NV-UV/3 must be stored between +5°C and +25°C. Bellow +5°C freezes irreversibly. Over 25-30°C it decomposes slowly till it can't be used. **To protect against heat, cold and sun.** Stored in the correct conditions, in its original well sealed package, it has a maximum stability of 6 months..

This product doesn't contain any solvents or dangerous components.

Our indications are based on serious laboratory studies and our experience, but do not excuse the user to make their own tests, because the materials diversity and the different use conditions, make yours the responsibility of their applications.

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EQUIPO: Maquina de ensayos universales SHIMADZU modelo AGS-X

Fecha de ensayo	10/04/2018	Velocidad de muestreo	100 pto/sg
Identificación Muestra	180410-2	Velocidad de la cruceta	100 mm/min
Nombre del operador	Juan Carlos	Humedad	50+/- 5%
Tipo de Ensayo	Resistencia de la Unión CORTE/PISO	Temperatura	23+/- 2°C
Método de Ensayo	UNE-EN ISO 17708	Envejecimiento	SI (7 Dias a 50°C)

CLIENTE Y PLAZA : LACTEA HEVEA (FRANCIA)
TIPO DE CALZADO : ENSAYOS PARA CALZADO DE CABALLERO
MATERIALES : SERRAJE / PISO DE CAUCHO
ADHESIVO EMPLEADO : SE INDICA
CONDICIONES DEL PEGADO : SERRAJE LIJADO / PISO, LIJADO+HALOGENADO.P=1Kg-1min

Nombre	Tipo de Fallo	Valor maximo de tensión	Valor medio de tensión	Valor mínimo de tensión
Parametros				
Unidad		kgf/cm	kgf/cm	kgf/cm
1-AQUATAACK 3835-UV+3% RETICULANTE DA	100%M2	4,80	3,38	2,52
2-AQUATAACK 1K-891/NV-3	100%M2	4,03	3,22	1,81
3-PLASTIKOL 553BV+5%DESMODUR RFE	100%M2	4,43	3,22	2,35

Comentarios:

Los resultados obtenidos son buenos en los tres casos.

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EQUIPO: Maquina de ensayos universales SHIMADZU modelo AGS-X

Fecha de ensayo	28/03/2018	Velocidad de muestreo	100 pto/sg
Identificación Muestra	180328-3	Velocidad de la cruceta	100 mm/min
Nombre del operador	Juan Carlos	Humedad	50+/- 5%
Tipo de Ensayo	Resistencia de la Unión CORTE/PISO	Temperatura	23+/- 2°C
Método de Ensayo	UNE-EN ISO 17708	Envejecimiento	NO

CLIENTE Y PLAZA : LACTEA HEVEA (FRANCIA)
TIPO DE CALZADO : ENSAYOS PARA CALZADO DE CABALLERO
MATERIALES : SERRAJE / PISO DE CAUCHO
ADHESIVO EMPLEADO : SE INDICA
CONDICIONES DEL PEGADO : SERRAJE LIJADO / PISO, LIJADO+HALOGENADO.P=1Kg-1min

Nombre	Tipo de Fallo	Valor maximo de tensión	Valor medio de tensión	Valor mínimo de tensión
Parametros				
Unidad		kgf/cm	kgf/cm	kgf/cm
1-AQUATAACK 3835-UV+3% RETICULANTE DA	100%M2	4,85	3,87	2,86
2-AQUATAACK 1K-891/NV-3	100%M2	4,43	3,66	2,97
3-PLASTIKOL 553BV+5%DESMODUR RFE	100%M2	4,33	3,67	3,11

Comentarios:

Los resultados obtenidos son buenos en los tres casos.



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UNE – EN ISO
9001 : 2000



Technical data sheet n. 83/3/2

PLASTIKOL 553/BV

Description and applications

Polyurethane solvent based adhesive. One component and partially selfcrosslinking. Medium drying time. Good spotting tack and heat resistance. Good specific adhesion to rubber without halogenating, especially when it is used mixed with a 5% of hardener (**Insodur or Desmodur**).

Technical Specifications.-

Solid content (%):	17.5 +/- 1.5%.
Viscosity Brookfield LVF (20°C):	1800 to 2500 mPa.s at 22 +/- 4°C
Solvents:	Mixture of ketones and aromatic hydrocarbons.
Reactivation temperature (°C):	70 to 90 °C, depending on the dry time
Open time, by heat reactivation:	

When used as a one component, between 0,5 and 24 hours of drying.

As a two-component (+5% Insodur or Deesmodur), a maximum of 1 hour.

Work hazards.-

Easy flammable product (F).

Stability.-

Good stability for a 6 month period, if containers are well sealed and stored in a cool-dry place

Packing : Tin-cans of 20, 10 and 5 litres

Our indications are based on serious laboratory studies and our experience, but do not excuse the user to make their own experiments, because the materials diversity and the different ways of use that are out our control , make their application be under your complete responsibility.

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Identificación Muestra	180410-1	Velocidad de la cruceta	100 mm/min
Nombre del operador	Juan Carlos	Humedad	50+/- 5%
Tipo de Ensayo	Resistencia de la Unión CORTE/PISO	Temperatura	23+/- 2°C
Método de Ensayo	UNE-EN ISO 17708	Envejecimiento	SI (7 Dias a 50°C)

CLIENTE Y PLAZA : LACTEA HEVEA (FRANCIA)
TIPO DE CALZADO : ENSAYOS PARA CALZADO DE CABALLERO
MATERIALES : SERRAJE / PISO DE CAUCHO
ADHESIVO EMPLEADO : SE INDICA
CONDICIONES DEL PEGADO : SERRAJE LIJADO / PISO, LIJADO+HALOGENADO.P=1Kg-1min

Nombre	Tipo de Fallo	Valor maximo de tensión	Valor medio de tensión	Valor mínimo de tensión
Parametros				
Unidad		kgf/cm	kgf/cm	kgf/cm
1-AQUATAACK 3835-UV+3% RETICULANTE DA	100%M2	7,60	6,04	5,32
2-AQUATAACK 1K-891/NV-3	100%M2	7,31	5,69	4,58
3-PLASTIKOL 553BV+5%DESMODUR RFE	100%M2	7,53	6,16	4,81

Comentarios:

Los resultados obtenidos son buenos en los tres casos.

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Identificación Muestra	180328-2	Velocidad de la cruceta	100 mm/min
Nombre del operador	Juan Carlos	Humedad	50+/- 5%
Tipo de Ensayo	Resistencia de la Unión CORTE/PISO	Temperatura	23+/- 2°C
Método de Ensayo	UNE-EN ISO 17708	Envejecimiento	NO

CLIENTE Y PLAZA : LACTEA HEVEA (FRANCIA)
TIPO DE CALZADO : ENSAYOS PARA CALZADO DE CABALLERO
MATERIALES : SERRAJE / PISO DE CAUCHO
ADHESIVO EMPLEADO : SE INDICA
CONDICIONES DEL PEGADO : SERRAJE LIJADO / PISO, LIJADO+HALOGENADO.P=1Kg-1min

Nombre	Tipo de Fallo	Valor maximo de tensión	Valor medio de tensión	Valor mínimo de tensión
Parametros				
Unidad		kgf/cm	kgf/cm	kgf/cm
1-AQUATAACK 3835-UV+3% RETICULANTE DA	100%M2	8,73	5,68	4,17
2-AQUATAACK 1K-891/NV-3	100%M2	7,03	5,50	4,59
3-PLASTIKOL 553BV+5%DESMODUR RFE	100%M2	6,49	5,69	4,72

Comentarios:

Los resultados obtenidos son buenos en los tres casos.



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UNE – EN ISO
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Hoja informativa 97 / 05 / 29

(VP-4677)

Revisión: 18/04

AQUATAACK 3835/UV + RETICULANTE DA

Solvent Free Products, for sole bonding.

DESCRIPTION

Aquataack 3835/UV is a medium viscosity water based adhesive. Reticulante DA is a solvent free poly-isocyanate, used as a hardener of the two products.

APPLICATION

For sole bonding by heat-activation, Aquataack 3835 must be used as a two-component adhesive, mixed with hardener RETICULANTE DA in a 3% rate.

TECHNICAL CHARACTERISTICS

Solid Content: 41+/-3 %

Viscosity Brookfield LVT: 2.000 a 5.000 mPa.s, a 22 +/-4°C

INSTRUCTIONS FOR USE

Materials must be prepared like this:

Upper leather and leather soles, roughing, like usual shoe making. The use of Eneplast H-1 + 3% of Reticulante DA is only necessary in non porous leathers and drying time must be between 30 minutes and 3 hours. In porous leather or textiles this primer is not necessary.

Resin rubber soles and rubber units, roughening followed by halogenation, minimum drying time, 1 hour.

Thermoplastic Rubber (TR) Soles, halogenating, drying time between 2 and 24 hours.

EVA microporous soles, roughing and primer with our INSOCOL IMPRIMACION 3000 + 5% Desmodur RFE; drying time between 1 and 3 hours. Then apply AQUATAACK 3835 without Reticulante DA.

PVC Soles, cleaning with Disolvente Difuminador.

Then use AQUATAACK 3835 + 3% RETICULANTE DA to upper leather and sole; then introduce the shoes on the production process to pass them through drying oven and heat-activation, in order to evaporate the water (film passes from white colour to transparent), and heat-activate the adhesive (heat-activation temperature must be between 65-75°C). Next immediately after, you must press, with the same pressure and pressure time than solvent based adhesives with medium/high termoplasticity. The initial strength values are similar to the solvent based adhesives.

IMPORTANT NOTES

Aquatack 3835/UV must be stored between +5°C and +30°C. At less than 5 °C they will freeze irreversibly. Stored in that conditions they have a maximum stability of 6 months.

Reticulante DA, must be maintain well sealed at its origin package and protected from humidity and light. At indicated temperature conditions can be stored for 6 months.

The mixture of the adhesive or primer with the hardener, must be done slowly and under constant waving, and has a pot life of between 5 and 8 hours maximum.

Brochure application must be done with nylon brochures and clean it up quickly and drying it after. They must not be used with solvent based adhesives

The use of drying ovens, is necessary due to the slow evaporation speed of water compared to solvents.

Contact bonding, at normal temperature is not possible.

Heat-activation must be done shortly after the gluing.

None of these products contains solvents, neither dangerous components that should be specificity. The products are not flammable and they do not need special precautions on its work use

Our indications are based on serious laboratory studies and our experience, but do not excuse the user to make their own tests, because the materials diversity and the different use conditions, make yours the responsibility of their applications.