IBS BOAT SUPPLIES

Everything for Inflatables

# HYPALON TOLUENE FREE TWO PART ADHESIVE INSTRUCTIONS

## Product Description

Hypalon Toluene Free Two Part Adhesive is a solvent based system formulated on polychloroprene rubber. It is used in conjunction with a Curing Agent as a two part high performance adhesive system for a wide range of industrial applications.

- Gives high strength bonds between a wide range of materials including all types of rubbers.
- Excellent resistance to heat, salt water and humidity.
- Easy to mix two part system - supplied in sets with the requisite amount of curing agent.
- Easy to apply by brush, roller or serrated trowel.
- Contact bonds can be made within 20-30 minutes, full cure in 48 hours.
- Mixed adhesive has a pot life of 4 - 6 hours.

HYPALON TOLUENE FREE ADHESIVE will bond natural, polychloroprene, butyl, nitrile, Hypalon and Polyurethane rubber materials, Rigid PVC, wood, leather and metal

It is particularly suitable for the fabrication of inflatable products such as boats, balloons, marine fenders and dracone barges and is also ideal for use in bonding rubber linings in storage tanks.

IMPORTANT
It is not recommended that Hypalon Two Part Adhesive be used on plasticised PVC because of the possibility of plasticiser migration.

## Method of Use

1. Ensure that the surfaces to be bonded are clean and grease free by thoroughly abrading them and by using Toluene Free Solvent to remove surface contamination.
2. Mix Glue & Curing Agent together thoroughly, for approximately 5 minutes, preferably in the proportions as supplied .
3. Apply an even coat of the mixed adhesive to both surfaces by brush.
4. Allow the first coat to dry for 20-30 minutes or until it can just be touched with the knuckles without any adhesive being transferred.
5. NOTE Three thin coats are preferable for maximum adhesion. The first coat should be allowed to dry for approximately 20 to 30 minutes before applying the final coats and allowing these to dry for 5 to 15 minutes between coats.
6. Join the surfaces, taking care not to trap any air, using as much pressure as possible. Components may be handled within minutes of being bonded.

| | |
|---|---|
| Tack life: | Approximately 5 to 15 minutes dependent on the surfaces being loaded. |
| Pot Life: | 4 to 6 hours in a closed container, but shorter in open containers due to solvent evaporation. Also the pot life can decrease with age of the adhesive. |
| Curing Time: | 48 hours under normal ambient temperature conditions but the strength of the adhesive bond continues to increase, reaching its maximum within 6 days. Cure rate may be accelerated by heating, e.g., 2 hours at approximately 70°C. |

IBS BOAT SUPPLIES

Everything for Inflatables

| | |
|---|---|
| Coverage: | Approximately 4m² per litre but can vary with material being bonded. (2m² bonded area) |
| Cleaner/Thinner: | Use Toluene Free Solvent for adhesive dilution, removal of surplus adhesive and cleaning of application tools and equipment. |

## Technical Data

| | | | |
|---|---|---|---|
| **Base:** | Polychloroprene | **Solids:** | Approx 22% |
| **Viscosity:** | Approx 3000 cps | **Colour:** | Off-White |
| **Tack Life:** | 5 – 15 mins | **Coverage:** | Up to 4m²/ltre |
| **Cleaner:** | Solvent 7 | **Flash Point:** | See MSDS |
| **Shelf Life:** | 12 months @ 5 - 25ºC | | |

**Typical Adhesive Characteristics**

| | **GLUE** | **CURING AGENT** |
|---|---|---|
| **Physical Form:** | Low viscosity liquid | Mobile liquid |
| **Colour:** | Off-White | Brown (Translucent) |
| **Chemical Type:** | Polychloroprene rubber | Isocyanate solution (MDI) |
| **Solvent:** | Hydrocarbon/ketone mixture | Chlorinated hydrocarbon |
| **Viscosity:** | 3.0 Ns/m² (30 poise) approx. | Low |
| **Solids Content:** | 22% approx. | 20% approx |
| **Specific Gravity:** | 0.9 approx | 1.3 approx |
| **Flammability:** | Highly flammable | Non-flammable |

| | |
|---|---|
| **Temperature resistance:** | From -40°C to +90°C but will withstand higher temperatures for shorter periods. |
| **Water resistance:** | Very good |
| **Oil, Petrol and Kerosene resistance:** | Fair - Good |
| **Solvent resistance:** | Not resistant to esters, ketones, aromatic and chlorinated hydrocarbons which may swell and soften the bond. |
| **Acid and Alkali Resistance:** | Good, virtually unaffected by 5N sodium hydroxide. |
| **Humidity resistance:** | Good, after exposure to 100°C RH at 38°C for 14 days. |
| **Ageing:** | Good but exposed adhesive film can darken. |

IBS BOAT SUPPLIES

Everything for Inflatables