



HELMITIN
QUALITY ADHESIVE SOLUTIONS

HARDENER 506

CROSSLINKING & ADHESION PROMOTING AGENT

Product Description

HELMITINHARDENER506 is a low viscosity liquid which, owing to its broad compatibility with many organic solvents such as methylene chloride, methyl ethyl ketone, acetone and toluene, can be easily mixed into most solvent-based adhesives. Since 506 reacts rapidly in the presence of moisture, adhesive systems must be free of water and alcohol. There is limited compatibility with petroleum distillates. Therefore, solvent systems containing petroleum distillates must be rich enough in the abovementioned active solvents, in order to prevent precipitation of HELMITINHARDENER506

Benefits

- Good on light-colored materials
- Easy mixing
- Toughens the adhesive
- Enhances adhesion
- Improves heat, oil, and solvent resistant
- Room temperature cure

Physical Properties

Base:	Triisocyanate in ethyl acetate
Solids Content:	27 ± 2%
Melt Viscosity:	Thin liquid
Specific Gravity:	1.00 @ 20°C/68°F
Color:	Transparent yellowish
Pot Life:	2-8 hours, depending on percentage added, temperature, adhesive composition and humidity conditions
Shelf Life:	Up to 9 months in tightly closed original containers

Suggested Uses

- HELMITINHARDENER506 is an excellent room temperature curing crosslinking agent for use in adhesives based on natural or synthetic rubbers, including polyurethanes and polychloroprenes.
- HELMITINHARDENER506 enhances adhesion to many difficult to bond rubber materials. The resistance to grease, oil, plasticizers, many solvents and heat is increased in compounds crosslinked with this product.
- Its light color makes it an excellent candidate for use on light-colored materials.

CAUTIONS

- Although the polyisocyanate in HELMITIN HARDENER 506 is of very low volatility at room temperature, certain precautions must be taken when handling.
- Provide adequate ventilation, such as is necessary for the ethyl acetate and the other solvents in the adhesive.
- HELMITIN HARDENER 506 is highly reactive and thus should not be allowed to get on the skin or other parts of the body. The wearing of gloves, goggles, etc. will help avoid such contact. If HELMITIN HARDENER 506 does contact body surfaces, wash immediately with soap and water. If eye contact occurs, flush with large quantities of water and then consult an eye physician.
- It is not recommended to spray HELMITIN HARDENER 506 or adhesives containing it. If spraying is contemplated, an adequate exhaust system and respirator must be used to prevent any inhalation of atomized material.
- The very high reactivity with moisture makes it essential to store HELMITIN HARDENER 506 in tightly sealed air-tight containers. Avoid repeated opening of larger shipping containers by the use of a smaller container, the size of a single day's usage, for transporting, adding and mixing.
- Store at normal room temperatures, not exceeding 40°C/104°F, and for periods of no longer than 6 months from the date of shipment.
- Purchasers must determine the suitability of this adhesive system for their materials and manufacturing process.
- Not to be taken internally

WARRANTY

Because Seller has no control over methods of product application or conditions of use, its product is warranted only to be made of standard commercial grade materials and in conformance with Seller's published specifications, if any. Any recommendations for the use of the product are based on tests or experience believed to be reliable and are furnished without compensation, and Seller does not guarantee the applicability or the accuracy of this information or the suitability of its product in any given situation. Buyer must make its own tests to determine the suitability of Seller's product for Buyer's particular use and Buyer assumes all risk and liability of use of Seller's product

USAGE TIPS

HELMITIN HARDENER 506 is normally used at 5 – 10% by weight, based on the weight of the adhesive. It should be added to the adhesive, taking care not to spill or splash the hardener. Mix only as much material as can be used within the pot life of the mix. Mix thoroughly. Be sure to reseal the hardener container airtight to keep atmospheric moisture away. The pot life of the mixture will vary, depending largely on the composition of the adhesive, the percentage of hardener used, the temperature of the mix and the amount of exposure to moisture. This can only be determined by the user for each individual set of conditions. Indications of the end of the pot life are increasing viscosity or gelling, resulting in more difficult application. Discard a mixture that has reached the end of its pot life, then mix fresh material. The gel that eventually occurs cannot be reversed by the addition of solvent.

IMPORTANT

HELMITIN HARDENER 506 is a pre-reacted polyisocyanate and thus has an extremely low level of volatility at room temperature. It should not be confused with monomeric isocyanates which are more volatile. Therefore, as far as vapors are concerned, when HELMITIN HARDENER 506 is used under normal conditions, no measures beyond those ordinarily taken during work with organic solvents, e.g. ethyl acetate, are usually necessary. HELMITIN HARDENER 506 will vary in color from clear to yellowish. Such variation in color does not affect the performance of the product. Beyond the shelf life limit, the product may become cloudy, thicken or gel. If this occurs the product is unusable.