

Technical Data Sheet Activator 51

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Product Description

Hernon® Activator 51 is solvent free product which is designed to initiate the cure of **Hernon®** toughened acrylic adhesives.

Since **Activator 51** contains no solvents, no waiting time for solvent evaporation is needed prior to assembly.

Typical Properties

Property	Value
Appearance	White liquid
Chemical Type	Monomer
Specific Gravity @ 25°C	1.10
Viscosity @ 25°C, cP	20 - 100
Flash Point	See SDS
Solvent	None
On Part Life, hours	2

Typical Curing Performance

The fixture time for **Hernon® Adhesives** with **Activator 51** is between 15 and 60 seconds depending on substrates with full cure obtained within 24 hours.

These times are based on specific bond line gaps and adhesive viscosity. All applications should be evaluated for actual fixture time before repeated use or establishing automated assembly procedures.

An increased bond line thickness may decrease strength and will increase fixture time.

Fixture time is defined as the time to develop a shear strength of 0.1 N/mm². Tested on steel lap-shear specimens, one side primed with **Activator 51**.

Hernon® Adhesive	Fixture Time (sec)
React 795	≤ 25

Shear Strength

Tested on lap-shear specimens with 1 side primed with **Activator 51** and tested according to ASTM D1002

Hernon® Adhesive	Shear Strength (psi)
React 795	≥ 1500

Impact Strength

Tested on lap-shear specimens with 1 side primed with **Activator 51** and tested according to ASTM D6110

Substrate	Cure at 22°C	Value
Steel	24 Hours	≥ 10 Joules

General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

Never Mix Activator and Adhesive directly in bulk.

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some case, these aqueous washes can affect the cure and performance of the adhesive.

Directions for Use

For best results apply a thin layer of **Activator 51**. Parts must remain immobilized following assembly until fixtured. This assures development of maximum bond strength.

If adhesive is applied directly over activator, parts should be assembled without delay since curing begins immediately. Reduced bond strength may be obtained with too much activator.

Activator can be easily applied with a mist sprayer for automated assembly. Pressurize dispensers with Nitrogen only, not air. Swabbing or transfer pad printing is also acceptable. Natural felt or open-cell monomer resistant polyurethane foams are suitable.

Cleanup

Excess activator and adhesive may be cleaned up with alcohol or acetate solvents.

Avoid skin and eye contact. Non-porous protective gloves or barrier hand cream should be used. Do not wear jewelry. Protective eye goggles should be worn when handling activator.

Storage

Activator 51 should be stored in a cool, dry location in unopened containers at a temperature between 45°F to 85°F (7°C to 29°C) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To

prevent contamination of unused material, do not return any material to its original container.

Dispensing Equipment

Hernon® offers a complete line of semi and fully automated dispensing equipment. Contact **Hernon® Sales** for additional information.

These suggestions and data are based on information we believe to be reliable and accurate, but no guarantee of their accuracy is made. HERNON MANUFACTURING®, INC. shall not be liable for any damage, loss or injury, direct or consequential arising out of the use or the inability to use the product. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine whether the product is of satisfactory quality and suitability for their operations, and the user assumes all risk and liability whatsoever, in connection therewith. Hernon's Quality Management System for the design and manufacture of high-performance adhesives and sealants is registered to the ISO9001 Quality Standard.