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**TECHNICAL BULLETIN
 LOUDSPEAKER ADHESIVES**

Description

For the last 35 years, superior loud speakers have been made utilizing LEEPOXY adhesives. These adhesives have provided a method for the rapid assembly of speaker components, while providing excellent tonal quality and reliability in climates the world over under conditions of high stress imposed on today's loud speakers.

LEEBOND adhesives provide the strength and rigidity required for good sound reproduction combined with sufficient flexibility to prevent tearing of the cone during use. The LEEBOND adhesives combine this unique balance of properties with rapid cure allowing for assembly line production and immediate packaging of the assembled speaker.

LEEBOND 30-25 is a black thixotropic epoxy formulated for assembly line adhesive bonding of loudspeakers and other industrial items. It provides a strong impact-resistant bond when used with the proper amount of LEECURE curing agents. LEEBOND 30-25 is black for fast response to infrared heating.

Handling and Mixing

Once the two components are properly mixed, the adhesive may be applied directly to the substrates. In order to insure a good strong bond, the surfaces of the substrates

must be clean and free from dirt, oil, grease, rust, water, and other foreign materials.

TYPICAL PROPERTIES LEEBOND 30-25	
Appearance	Black viscous liquid
Thixotropy @ 25°C, cps	350,000
Viscosity @ 25°C, cps	55,000
Density, pounds/gallon	10.0
Shelf life, months	12

Cure

Once the adhesive is applied, the parts should be joined and cured within a matter of minutes. If the uncured adhesive is exposed to humidity for periods of time before the two components are positioned, the hardener becomes partially deactivated by the moisture in the air.

Depending on the heat capacity of the parts being bonded, they may be preheated so that rapid cures are obtained with further heating. This is most applicable with thick metal or ceramic components that will not cool down before the adhesive cures. Preheating the parts, even to 110 – 120°F, reduces the effect of humidity and insures a better bond.

The bonding of paper, cloth, and other low heat conductive components is easily accomplished by applying the adhesive to the components at room temperature. The

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TECHNICAL BULLETIN

assembly is then placed on a belt, which travels under a heat source such as a quartz lamp radiant heater or infrared lamp, so that by the time the part emerges the adhesive is completely cured. This operation can vary from approximately 15 seconds up to four minutes, depending on the hardener used, line speed and the distance from the heat source.

TYPICAL HANDLING PROPERTIES			
	B-612	B-614	B-1310
Mix Ratio ¹ , phr	10	10	10
Gel Time @ 25°C, 11 g, min	1.2	12	25
Cure Time @ 25°C, 1/8-inch bead, sec.	180	---	---
Cure Time @ 66°C, seconds	20	60	90
Hardness, Shore D	>85	>85	>85

¹ Use level of BF₃ hardener with
LEEBOND 30-25 TA

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