

Humex is a *humectant-free* couplant. It was developed for flaw detection, acoustic emission testing, and thickness gaging applications where delayed corrosion could occur from residual humectants or where residual humectants could interfere with subsequent liquid penetrant inspection or composite bonding and lamination. Humex dries rapidly and has a narrow temperature range. For a longer drying time, humectant-free couplant with a broader operating range, consider Gel 3000 or Thermasonic.

Temperature Operating Range:

32° to 130°F (0° to 54°C)

Benefits

- Contains no humectants
- Environmentally benign

Safety

- Contains NO glycol, glycerine, humectants, solvents, heavy metals, harsh surfactants, glycol ethers, nitrites, silicones, dyes or fragrances.
- Non-flammable, Non-irritating, orally nontoxic

Removal

- Water-soluble; easily removed with water rinse

Chemical Analysis and Certification

An independent laboratory analysis of Chlorine and Sulfur referencing ASTM procedures is furnished with each shipment at no additional charge.

- Meets GE Nuclear Energy Specification D50YP12, Rev. 1.

Chemistry

Total Halogens.....	<50 ppm
Sulfur.....	<50 ppm
Nitrite.....	<50 ppm
Low melting point metals.....	<50 ppm

Properties¹

Viscosity	~180,000 cps (Brookfield Helipath Spindle E @ 1.5 rpm)
pH	7.8 [±] .5

¹At ambient temperature.

Environmental Awareness

Sonotech developed environmentally benign couplants to minimize impact on the environment. Humex contains biodegradable materials, safe for disposal. The likelihood of skin irritation has been reduced through the use of cosmetic grade ingredients.

Environmentally benign couplants are designed specifically for applications where couplant may not be removed by the inspector, may later be removed by weather, or could come into contact with animals, humans, and waterways.

Acoustic Transmission

Optimal transmission requires that an ultrasonic couplant have no air bubbles that can reflect, scatter, and attenuate sound waves. Sonotech's unique processing eliminates couplant air bubbles.

Corrosion Inhibition

Humex couplant contains a corrosion inhibitor for steel that is compatible with aluminum and titanium alloys. Humex is not recommended for use on cast iron if ferrous corrosion is a concern. For a humectant free product for cast iron, consider UT-X Plus. The corrosion inhibition potential for Humex is rated at 45 on the Sonotech Ultrasonic Couplant Ferrous Corrosion Characteristics Chart.

Recommended Alternate Products

The polymer (thickening agent) in Humex can be thinned or destroyed in the presence of salt cake. When testing power plants where salt cake is present use humectant-free UT-X or UT-X Powder.

Packaging

5-gallon (18.9 liter) container

