



**LOCTITE®**

## Loctite® 5100™ and 5110™ Flexseal® Penetrating Sealants

*For Cost Effective Sealing of Electrical and Electronic Components*



Henkel

Henkel's Loctite® 5100™ and 5110™ Flexseal® penetrating sealants provide 100% sealing of microscopic gaps and pores in critical electrical and electronic components. Microscopic voids are inherent in many electronic assemblies – particularly where dissimilar materials are brought together. With these sealants, parts are permanently sealed from moisture, solvents, fluxes and corrosive agents.



*Connectors, coils, sensors, wire harnesses and other components can be permanently sealed with Loctite® Flexseal® Penetrating Sealant.*

# Loctite® 5100™ and 5110™ Flexseal® Penetrating Sealants

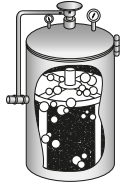


## LOCTITE® FLEXSEAL® PROCESS

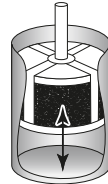
Loctite® 5100™ and 5110™ Flexseal® penetrating sealants are applied through a cost-effective process called impregnation, which optimizes sealant penetration into the parts. Parts are immersed in a sealant bath under a vacuum, forcing air out and sealant in. After cure, parts are ready for defect-free operation.



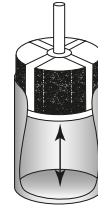
- Place parts into basket, load into process tank



- Conduct vacuum/ambient, vacuum pressure, or dry vacuum/pressure cycle
  - allow soak while sealant penetrates
  - release pressure or vacuum, raise basket and drip or centrifuge



- Conduct rinse cycle(s) to remove all surface resin from parts
  - surfactant treated water
  - ambient or heated water



- Surface activator treatment
- Final rinse
- Dry parts

### PROCESS BENEFITS

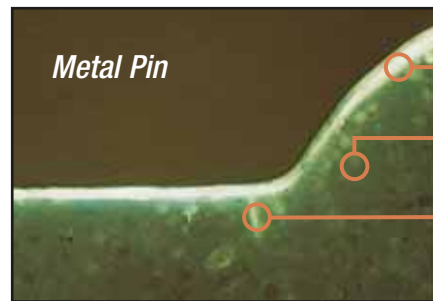
- Room temperature cure won't harm sensitive components
- Fast processing of many parts to achieve the lowest cost per sealed part
- No shrinkage, sealant is 100% reactive

## LOCTITE® FLEXSEAL® PRODUCT TECHNOLOGY

Loctite® Flexseal® 5110™ is designed for applications requiring higher temperature resistance (400° to 450°F range) and fuel resistance. Loctite® Flexseal® 5100™ is designed for applications requiring more flexibility after impregnation, such as harnesses and connectors/sensors with wire leads. Loctite® Flexseal® 5100™ also has enhanced thermal cycling capabilities.

### PRODUCT BENEFITS

- Seals parts completely
- No change in dimensions or appearance
- Remains flexible through thermal changes
- Excellent solvent resistance, including gasoline, aviation fuel and chlorinated solvents
- Excellent temperature resistance
- Improved durability and long-term reliability of components
- Improved dielectric properties
- No adverse effects on solderability or electrical conductivity
- Meets thermal shock requirements (e.g. wave solder)
- Eliminates need for costly, unsightly topcoats



*Metal Pin*

*Loctite® Flexseal® Penetrating Sealant*

*Plastic body*

*Connector in molded plastic body sealed with Loctite® Flexseal® Penetrating Sealant*

Actual photo, magnified to 200X, of a plated lead in a glass-filled plastic molding. Bright area is a fluorescent glow under UV light of sealant which has penetrated the void between the two materials.



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