



**C² Repair Kit
Mixing Instructions
NSM-HS-C2R**

Product Description

Sealant kit for repairing leaking fuel lines.

Kit Includes

- 8 oz. can of Repair Part A
- 4 oz. can of Reinforcement Part A
- Two 0.5 oz. bottles of Part B in silver bags
- One 4 oz. can of MIL-PRF-23236, Type VI, Class 5 and 7 Grade C qualified Primer Part A
- One 4 oz. can of MIL-PRF-23236, Type VI, Class 5 and 7 Grade C qualified Primer Part B
- Fiberglass reinforcement
- Three pairs of nitrile gloves
- Three mixing sticks
- Paint brush x2
- Putty knife

Extra Equipment/Materials Needed

- Isopropyl alcohol (rubbing alcohol)
- Degreaser
- Sanding/grinding equipment
- Clean rags
- Timing device
- Scissors to cut fiberglass



PPE Required

- Nitrile or latex gloves (three pairs provided)
- Safety goggles/glasses



**C² Repair Kit
Mixing Instructions
NSM-HS-C2R**

Surface Preparation

- 1) Remove paint, rust, and surface debris on and around the defective area using sanding and/or grinding equipment. Bare metal should be visible.
- 2) Use a clean rag and isopropyl alcohol to wipe down the sanded area ensuring there is no dust, debris, or residue. If residue exists, wipe area with fresh alcohol until residue is removed.
- 3) Apply the degreaser to a clean rag so that it is damp, but not saturated.
- 4) Wipe down the defective area with the degreaser-soaked rag.
- 5) Let the degreaser sit for 10 seconds, then remove with a clean rag.
- 6) Use a clean rag and isopropyl alcohol to wipe down the area to which the degreaser was applied ensuring there is no residue. If residue exists, wipe area with fresh alcohol until residue is removed.
- 7) With a clean mixing stick, Mix Primer Part A until resin is cream in color and does not look separated, as shown in Figure 1. Save the mixing stick for the next step.



Figure 1: Left - Unmixed Primer Part A, Right - Properly mixed Primer Part A.

- 8) Immediately pour the contents of the Primer Part B can into the Primer Part A can and mix until resin is cream in color and does not look separated. The mixed primer should look the same as the fully mixed Part A in step 7.
- 9) Apply the mixed primer to the defective area using a paint brush as shown in Figure 2.
 - a. The primed area should cover the defect and also an area about 1/2" around the defect. The mixed primer has a pot life of two hours at 77°F (25°C).



Figure 2: Applying primer to a section of pipe.

- 10) Allow primer to sit for two hours.



**C² Repair Kit
Mixing Instructions
NSM-HS-C2R**

Repairing a Leak

- Gloves must be worn during the repair process.
 - All mixing can be done in the product containers.
 - **Part B bottle must be disposed of as HAZMAT.**
- 1) With a clean mixing stick, mix Repair Part A until the resin is gray in color and the particles are evenly dispersed, as shown in Figure 3. Save the mixing stick for the next step.

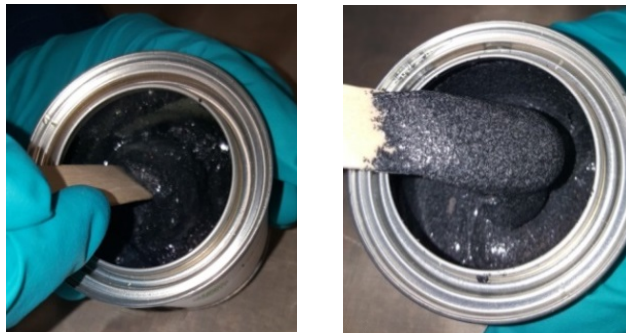


Figure 3: Properly mixed Part A

- 2) Immediately pour contents of one Part B bottle into Repair Part A container and mix for 30 seconds.
- 3) Allow resin to age for 8 minutes, until it has a sticky, putty-like consistency.
- 4) Apply resin to the defective area using fingers, ensuring that any cracks and/or holes are completely plugged and covered, as shown in Figure 4.
 - a. The repair resin should cover an area that includes the defect and an area about ¼" around the defect. The mixed resin has a working life of 5-10 minutes after the aging period.

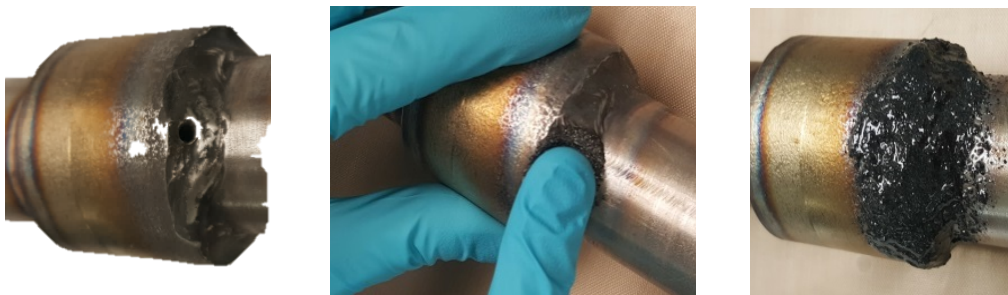


Figure 4: Repair resin application

- 5) Flatten the edges of the repair by pressing down firmly with thumb



**C² Repair Kit
Mixing Instructions
NSM-HS-C2R**

Applying Fiberglass Reinforcement

- Gloves must be worn during the reinforcement process.
 - All mixing can be done in the product containers.
 - This step should be performed immediately following the repair process.
 - **Part B bottle must be disposed of as HAZMAT**
- 1) Cut the provided fiberglass so it completely covers the repaired area and extends beyond the repair about ¼".
 - 2) Pour the contents of one Part B bottle into the Reinforcement Part A container and mix with a clean mixing stick for 30 seconds, until the resin turns opaque, as shown in Figure 5.



Figure 5: Color change of Reinforcement resin

- 3) Use paint brush to apply thin layer of Reinforcement resin on the repair as well as all the way around the diameter of the pipe as shown in Figure 6.



Figure 6: Applying Reinforcement resin to pipe



**C² Repair Kit
Mixing Instructions
NSM-HS-C2R**

- 4) Place one end of the fiberglass over the resin covered area. Add more Reinforcement resin to the fiberglass to wet it out and tightly wrap the entire diameter of the pipe. Ensure there are no air bubbles between the fiberglass and the pipe, and that all the fiberglass wrapping is covered with resin. See Figure 7.



Figure 7: Applying fiberglass reinforcement to repaired area

- 5) Use the remaining Reinforcement resin to completely cover the applied fiberglass as shown in Figure 8.



Figure 8: Fully resin soaked fiberglass application

- 6) Once repair is complete, wait one hour before re-pressurizing the system.

Product Information

For additional product information, please contact a NanoSonic sales representative:

Phone: 540.626.6266

E-mail: sales@nanosonic.com