

## **Technical Bulletin**

Place a copy of this bulletin in the front of each Blueprints Manual. Redline drawings as needed and include a TB reference note. Reference TB implementation on site Action Item Box-chart and/or site tool history management log.

Number: 061
Date Issued: 03/01/07
Expiration Date: None

| Subject/Key Words: | Ozone Gas Leak       | s; Kel-F tubing; PFA Tubing   |
|--------------------|----------------------|---|
| Classification:    | ■ Informational      | ☐ Mandatory ☐ Safety Alert ☐ PM Impact  |
|                    | ☐ Warranty<br>Impact | Purchase Parts No Charge For Parts expires / Reference this TB# when ordering NC parts. |
| Akrion Procedures: |                      |   |

**Issue:** Ozone flow kits plumbed with Kel-F (PCTFE) tubing may be prone to leaks.

Although the Kel-F may be less permeable than PFA tubing, this advantage is offset by its propensity to become brittle and crack after prolonged exposure to high-

concentration ozone.

**Symptoms:** Gas leaks revealed by routine inspections or ozone concentration monitoring

equipment.

**Test/Validate:** Check your ozone flow system blueprints and BOMs for indications that Kel-F

tubing was used on the system.

Most Kel-F flow systems were ECO'd back to PFA tubing in Q3 2006, and

production changed back to all PFA tubing thereafter.

Some systems manufactured post Q3 2006 - although noted as having Kel-F on the

 $\ensuremath{\mathsf{BOM}}$  - were actually fitted with PFA. A recent cleanup ECO has captured all

remaining kits to correctly call out the use of PFA tubing.

**Solution:** Replace suspect Kel-F (PCTFE) tubing with PFA tubing. Redline the ozone system

blueprints in the field so 1/4" Kel-F tubing part number TUB3A0007 is corrected to

1/4" PFA tubing number TUB001012.

Replace Kel-F tubing as needed, or as a preventive measure.