

STORAGE INSTRUCTIONS: TARGA® II HF CARTRIDGES

A. SHELF LIFE

The TARGA® II cartridges leave the factory stored in a glycerin and water solution. From the date of shipment, the cartridge shelf life in the original packaging is one year. This assumes that the sealed bags have not been opened or damaged, and the conditions shown in Sections B&C are met.

B. HANDLING

1. The boxes should not be dropped or crushed.
2. The cartridges should be stored horizontally.

C. CARTRIDGE STORAGE CONDITIONS

1. Keep the cartridges in their original packaging and store in a horizontal position.
2. Store indoors out of direct sunlight.
3. Do not allow the cartridges to freeze, and they should be kept at less than 40°C (104°F).
4. The preferred long-term storage temperature range is 10°C to 30°C (50 to 85°F), at relative humidity below 70%.

D. USED CARTRIDGE STORAGE SOLUTION

1. **Short-term shut-down (up to 3 days):** Cartridges should be thoroughly cleaned and left in water at 5-25°C (41 to 77°F).
2. **Long-term shut-down (3 days or longer):** cartridges should be cleaned, rinsed and impregnated before storage with one of the following solutions:
 - a. Glycerin @ 80 – 100% (best)
 - b. Phosphoric acid @ pH 2 – 3
 - c. Benzoic acid or sodium benzoate @ 1,000 ppm
 - d. Sodium bisulfite or sodium metabisulfite @ 1,000 – 5,000 ppm

Cartridges stored in sodium bisulfite or sodium metabisulfite should be flushed with clean water and impregnated with fresh solution every six-months. Once impregnated, the cartridges should be left on the system with all valves closed or removed from the system and sealed in plastic bags. Storage conditions described in Section C should be followed.

E. POST-STORAGE CLEANING PROCEDURE

All cartridges should be drained, rinsed and cleaned according to KMS' recommended pre-startup procedures prior to restarting the system on production.

F. WATER QUALITY GUIDELINES

For water quality guidelines for storage solutions please refer to KMS Water quality guidelines for cleaning, diafiltration & storage.