

**ITEM: Cream Substitute**

**NSN:** 8940-00-782-3161

**ITEM SPECIFICATION:** MIL-C-43338  
CID A-A-20043

**APPROXIMATE CALORIC VALUE:** 19-21 Kilocalories (ANCILLARY)

**CHARACTERISTICS OF ITEM:**

**APPEARANCE:** Dry state: White to light cream color, granular powder that is free flowing, free of lumps (see Special Notes).

**ODOR:** : Should approximate that of commercial, spray dried, non-dairy creamer

**FLAVOR:** Should approximate that of commercial; spray dried, non-dairy creamer

**TEXTURE:** Dry state: Granular, free-flowing powder, free of lumps / caked masses (see Special Notes). When used in coffee, it should disperse/dissolve rapidly without curdling and with only a slight trace of melted fat on the surface.

ESTIMATED SHELF-LIFE AT: 80 DEGREES F: 36m  
100 DEGREES F: 6m

**POSSIBLE DETERIORATIVE CHANGES:**

**Appearance:** Rehydrated: Not readily dispersed or dissolved when placed in hot liquid. Dehydrated: Darkened, lumpy or caked.

**Odor:** Rancid, stale

**Flavor:** Rancid, stale, oxidized, bitter, soapy, tallowy.

**Texture:** Lumpy, clumped, caked (see Special Notes).

**UNIQUE EXAMINATION/TEST PROCEDURES:** Initially examine in dry state for appearance and texture; then examine in instant coffee. If product is caked or lumped in dry state, examine the package closely for cuts; tears, holes or open seals. Inserting a pocket flashlight inside the package while in a dark room often aids in identifying package integrity defects. Also shake package vigorously ten times and observe for minute quantities of product that may sift out of package especially at the juncture of the seams and the folded edge of the package. The defect is appropriately called a sifter. When testing in coffee, drop creamer into coffee and observe

particle dispersion for 15 seconds; then stir coffee for 15 seconds and observe after one minute for the defects described above.

SPECIAL NOTES: Lumps that break apart under light pressure (e.g., pressed between the fingers gently) are of no concern.