Food and Drug Administration, HHS

§ 640.104 Potency.

(a) Antibody levels and tests. Each lot of final product shall contain at least the minimum levels of antibodies for diphtheria, measles, and for at least one type of poliomyelitis. In the event the final bulk solution is stored at a temperature of

\[ -10 \, ^\circ C \] or lower. The globulin as a solid free from alcohol and containing less than 5 percent moisture, shall be stored at a temperature of \[ 0 \, ^\circ C \] or lower.

(d) Determination of the lot. Each lot of Immune Globulin (Human) shall represent a pooling of approximately equal amounts of material from not less than 1,000 donors.

(e) Sterilization and heating. The final product shall be sterilized promptly after solution. At no time during processing shall the product be exposed to temperatures above \[ 45 \, ^\circ C \], and after sterilization the product shall not be exposed to temperatures above \[ 32 \, ^\circ C \] for more than 72 hours.

§ 640.103 The final product.

(a) Final solution. The final product shall be a 16.5 ± 1.5 percent solution of globulin containing 0.3 molar glycine and a preservative.

(b) Protein composition. At least 96 percent of the total protein shall be immunoglobulin G (IgG), as determined by a method that has been approved for each manufacturer by the Director, Center for Biologics Evaluation and Research, Food and Drug Administration.

§ 640.102 Manufacture of Immune Globulin (Human).

(a) Processing method. The processing method shall be one that has been shown: (1) To be capable of concentrating tenfold from source material at least two different antibodies; (2) not to affect the integrity of the globulins; (3) to consistently yield a product which is safe for subcutaneous and intramuscular injection; and (4) not to transmit viral hepatitis.

(b) Microbial contamination. Low temperatures or aseptic techniques shall be used to minimize contamination by microorganisms. Preservatives to inhibit growth of microorganisms shall not be used during processing.

(c) Bulk storage. The globulin fraction may be stored in bulk prior to further processing provided it is stored in clearly identified hermetically closed vessels. Globulin as either a liquid concentrate or a solid and containing alcohol or more than 5 percent moisture shall be stored at a temperature of \[ -10 \, ^\circ C \] or lower. Globulin as a solid free from alcohol and containing less than 5 percent moisture, shall be stored at a temperature of \[ 0 \, ^\circ C \] or lower.

§ 640.101 General requirements.

(a) Heat stability test. Approximately 2 ml. of completely processed material of each lot shall not show any visible sign of gelation after heating in a 12 x 75 mm. stoppered glass tube at \[ 57 \, ^\circ C \] for 4 hours.

(b) pH. The pH of final container material shall be \[ 6.8 \pm 0.4 \] when measured in a solution diluted to 1 percent protein with 0.15 molar sodium chloride.

(c) Turbidity. The product shall be free of turbidity as determined by visual inspection of final containers.

(d) Date of manufacture. The date of manufacture is the date of initiating the last valid measles or poliomyelitis antibody test (§ 640.104(b) (2) and (3)) whichever date is earlier.

(e) Labeling. In addition to complying with all applicable labeling required in this subchapter, labeling shall indicate that:

(1) There is no prescribed potency for viral hepatitis antibodies.

(2) The product is not recommended for intravenous administration.

(3) There is no prescribed potency for viral hepatitis antibodies.

(4) The product is not recommended for intravenous administration.

(5) There is no prescribed potency for viral hepatitis antibodies.

(6) The product is not recommended for intravenous administration.

(7) There is no prescribed potency for viral hepatitis antibodies.

(8) The product is not recommended for intravenous administration.

(9) There is no prescribed potency for viral hepatitis antibodies.

(10) There is no prescribed potency for viral hepatitis antibodies.
temperature above 5 °C the antibody level tests shall be performed after such storage with a sample of the stored material.

(b) Minimum levels. The minimum antibody levels are as follows:

(1) No less than 2 units of diphtheria antitoxin per ml.

(2) A measles neutralizing antibody level that, when compared with that of a reference material designated by the Center for Biologics Evaluation and Research (CBER), Food and Drug Administration, as indicated in paragraph (c) of this section, demonstrates adequate potency. The Director, CBER, shall notify manufacturers when a new reference material will be used and will advise manufacturers of an appropriate antibody level taking into account a comparison of the new reference material to the previous reference material.

(3) A poliomyelitis Type 1, Type 2, or Type 3 neutralizing antibody level that, when compared with that of a reference material designated by the Center for Biologics Evaluation and Research, Food and Drug Administration, as indicated in paragraph (c) of this section, demonstrates adequate potency. The Director, CBER, shall notify manufacturers when a new reference material will be used and will advise manufacturers of an appropriate antibody level taking into account a comparison of the new reference material to the previous reference material.

(c) Reference materials. The following reference materials shall be obtained from the Center for Biologics Evaluation and Research:

(1) Reference Immune Globulin for correlation of measles antibody titers.

(2) Reference Immune Globulin for correlation of poliomyelitis antibody titers, Types 1, 2, and 3.

Subpart K [Reserved]