

PART 3

CHEMICAL PROPERTIES

(Snip)

1.2 Parts that are made of materials which are mainly composed of polyvinyl chloride, polyethylene (excluding parts on which paint coating is applied)

Materials shall conform to the requirements in 1.2.2 of this standard when tested in accordance with the test method specified in the above requirements. The water used for the test shall be distilled water.

1.2.1 Preparation of test solution

Wash the test specimen well with water. Immerse the test specimen in water at a temperature of 40°C prepared at the rate of 2 ml per 1 cm² of the surface area of the test specimen, cover with a watch dish, and allow it to stand for 30 minutes while maintaining the temperature at 40°C with occasional stirring. Use the resulting solution as test solution.

1.2.2 Requirements

(1) Consumption of potassium permanganate

(Materials which are mainly composed of polyvinyl chloride)

When tested in accordance with the test methods specified in 2.2 of this standard, the test result calculated under the specified formula shall be less than or equal to 50µg/ml.

(Materials which are mainly composed of polyethylene)

When tested in accordance with the test methods specified in 2.2 of this standard, the test result calculated under the specified formula shall be less than or equal to 10µg/ml.

(2) Residue on evaporation

(Materials which are mainly composed of polyvinyl chloride)

When tested in accordance with the test methods specified in 2.3 of this standard, the test result calculated under the specified formula shall be less than or equal to 50µg/ml.

(Materials which are mainly composed of polyethylene)

When tested in accordance with the test methods specified in 2.3 of this standard, the test result calculated under the specified formula shall be less than or equal to 30µg/ml.

(3) Heavy metals

When tested in accordance with the test method specified in 2.4 of this standard, the color obtained from the test solution shall not be deeper than that of the comparison standard solution. (As Pb, 1 µg/ml or less)

(4) Arsenic

When tested in accordance with the test method specified in 2.5 of this standard, the color obtained from the test solution shall not be deeper than that of the comparison standard solution. (As arsenious acid, 0.1 µg/ml or less)

(5) Cadmium (excluding materials mainly composed of polyethylene)

When tested in accordance with the test method specified in 2.6 of this standard, the test result shall be less than or equal to 0.5 µg/ml of cadmium for the test solution.

(Snip)

1.4 Vinyl chloride resin coating

The coating shall conform to the requirements in 1.4.2 of this standard when tested in accordance with the test methods specified in the above requirements. The water used for the test shall be distilled water.

1.4.1 Preparation of test solution

Use a toy with coating or a piece isolated from it, as a test specimen, and wash it well with water. Immerse the test specimen in water at 40°C prepared at the rate of 2 ml per 1 cm² of the surface area of the test specimen, cover it with a watch dish, and allow it to stand for 30 minutes while maintaining at 40°C with occasional stirring. Use the resulting solution as test solution.

1.4.2 Requirements

(1) Consumption of Potassium permanganate

When tested in accordance with the test method specified in 2.2 of this standard, the test result shall be less than or equal to 50µg/ml.

(2) Residue after evaporation

When tested in accordance with the test method specified in 2.3 of this standard, the test result shall be less than or equal to 50µg/ml.

1.5 The paint coating applied to the body or the components of the toys (excluding the printing ink used for paper containers) (including Vinyl chloride resin coating)

The paint coating shall conform to the requirements in 1.5.2 of this standard when tested in accordance with the test methods specified in the above requirements.

Supplementary provision :

This revision is put into effect for applications on and after April 1, 2010.