

МАРКИРОВКА ИЗДЕЛИЙ ИЗ ПЛАСТИКА КАК ФАКТОР, ОПРЕДЕЛЯЮЩИЙ ИХ БЕЗОПАСНОЕ ИСПОЛЬЗОВАНИЕ И УТИЛИЗАЦИЮ

MARKING OF PLASTIC PRODUCTS AS A FACTOR DETERMINING ITS SAFE OPERATION AND DISPOSAL

E. Bondarovich, I. Karnatsevich
Е. Н. Бондарович, И. В. Карнацевич

*Государственное учреждение образования «Гимназия № 9 г. Минска»,
г. Минск, Республика Беларусь
trio_minsk@tut.by*

State Educational Establishment «Gymnasium 9 of Minsk», Minsk, Republic of Belarus

В ходе работы выбирались наиболее употребляемые в быту пластиковые изделия, определялась их принадлежность к одной из семи групп и давались рекомендации по безопасности их использования.

The article is devoted to examining seven different kinds of plastic material and disposal of plastic products on the basis of their marking. In the course of the work, the most widely used plastic products were chosen, their belonging to one of the seven groups was determined and recommendations were given on the safety of their use.

Ключевые слова: пластиковые изделия, маркировка, использование, утилизация, токсичные вещества.

Keywords: plastic products, marking, operation, disposal, recycle, toxic substances.

The aim of work: on the basis of marking, determine the rules for the safe operation and disposal of plastic products used in everyday life.

Tasks: 1) to study the signs of marking, to present their description; 2) to conduct a quantitative analysis of plastic products that are used at home; 3) compile a brochure containing the basic rules for the safe operation and disposal of plastic products on the basis of their marking.

Actuality: life in the modern world cannot be imagined without the daily use of plastic products. Dishes, toys, all kinds of package and wrapping, films, bags, plastic windows, linoleum, garden furniture, lids, baby bottles are just a small part of such products. They, with their not correct usage and disposal, are harmful to human health, and also significantly pollute the environment and have an extremely unfavourable effect on it. Marking, which is applied to most plastic products, determines its type and its safer use. In our work, after studying the marking, we determined the basic rules for the operation and disposal of plastic products; in this way we seek to minimize the negative consequences from their use.

At first stage of our work, we took plastic products at home, in our classroom, and determined how the marking looks, where it is usually located and how many types it has. At second stage, we studied the descriptions of all types of markings, took an extract of 150 plastic items, carried out a quantitative analysis of the types of marking, presenting the results in the form of a diagram. At third stage, based on which products are frequently used in everyday life and descriptions of their markings, we compile rules for their safe use and disposal.

After the research we made the following conclusions:

1. When you buy plastic products, always pay attention to the presence of marking. Its absence is the first sign of producers' bad faith and poor quality of the goods.

2. Try not to use products marked 6 in everyday life. Such products contain carcinogen.

3. Products marked 3 are contraindicated for food use.

4. Do not reuse plastic with marking 1 (especially bottles). When reused, the bottle or box emits toxic substances.

5. Do not heat food in the microwave oven in a plastic container, especially marked 6 – for example, yogurt cups.

6. Limit the use of plastic items marked 7 (especially baby bottles) for up to 1–2 months, as they emit a dangerous substance with often washing and heating.

7. Do not fill plastic containers with alcoholic beverages, vinegar or other liquids aggressive to plastic.

8. Use special heat-resistant bags to freeze products, not ordinary ones.

9. Do not throw away items marked 3 and 7 in the containers for plastic as these types of plastic are not recyclable and reusable.

10. There is also no sense in throwing out in the containers for plastic Tetra-Pak packages, tubes from toothpaste, and packaging from coffee. These products, apart from plastic, contain metal, and technologies for their recycling do not exist yet.

11. Never burn plastic products, especially with markings 3 and 6, as when burning into the air very dangerous poisons are released.

12. Try to minimize contact with plastic products.