

Handout Types of Plastic

В ЕС <https://www.europarl.europa.eu/news/bg/headlines/society/20181212STO21610/plastmasovi-otpadtsi-i-retsiklirane-v-es-danni-i-fakti>

<https://zalepi.eu/bg/%D0%B2%D0%B8%D0%B4%D0%BE%D0%B2%D0%B5-%D0%BF%D0%BB%D0%B0%D1%81%D1%82%D0%BC%D0%B0%D1%81%D0%B8/>

Type of plastic	Features	Uses	Recycling
<p>P1 PET https://youtu.be/29Az-dPwtg8</p> <p>https://www.renovablesverdes.com/bg/que-es-el-pet/</p> <p>Полиетилен терефталат</p> <p>Иван, Алекс П, Калоян К, Касения</p> <p>(TEAM 1)</p>	<p>Polyethylene terephthalate Полиетилен терефталат/полиестер</p> <p>Durable to high temperature, UV rays, acids and base, Flexible, light, cheap, One-time-use, no colour, transparent</p> <p>Can withstand the cold of minus 40 degrees (in video 5)</p> <p>Are produced from petrol (oil, petrol, gas, kerosene, black gold)</p>	<p>Bottles for soft drinks, water, juice, mouthwash, ketchup, food trays, cosmetic products, and sweet smelly oil.</p> <p>If I wash my PET containers in the dishwasher before dropping them in the bin, they come out shrunken and flat.</p> <p>Други рекламни елементи. Например плакати или знаци за визуална комуникация. дисплеи в магазини и различни търговски изложения или събития.</p>	<p>Yes</p> <p>Products made of recycled PET – carpets, fleece jackets (шушлекови), bags, comforters (завивки)</p> <p>текстилната, автомобилната и мебелната промишленост.</p>
<p>HDPE https://youtu.be/xoBYLwwjr9E</p> <p>Полиетилен с висока плътност</p> <p>Пресиян, Димитър, Пламена, Стелия</p> <p>(TEAM 2)</p>	<p>High-density polyethelene (or HDPE) Полиетилен с висока плътност Pigmented and unpigmented Оцветен или безцветен looks good, the products in it taste good, Excellent resistance to most solvents (разтворители) Go-to plastic type - capable of being deformed</p>	<p>Unpigmented Products with the short shelf life, like milk (краткотрайни) For detergents, cleaners, industrial chemicals, antifreeze and bleach. For shampoos, conditioners and motor oil and soaps. Cereal boxes, shopping cart, grocery bags, Ламинат /'læm.ɪ.nət/</p>	<p>Yes</p> <p>Pipes, buckets, flower pots, plastic lumber (материал, плоскост), recycling bins.</p>

<p>PVC https://youtu.be/ZNOvpRMdmCo</p> <p>Поливинил хлорид</p> <p>Асен, Иваил, Калина, Светозара</p> <p style="text-align: center;">(TEAM 3)</p>	<p>Polyvinyl chloride /,pɒl.i.vaɪ.nəl 'klɔːraɪd/ made by mixing carbon and chlorine /'klɔːri:n/. Въглерод и хлор Bad rap (punishment) - toxic Two forms – rigid and flexible (by additives – mysterious liquids -> health risks) Твърда и гъвкава Can be easily processed with cutting tools. Fire resistant, weather proof</p>	<p>Containers and packaging supplies - personal care, chemical and industrial products; food items – jerky, spices and seasoning. Опаковки за местни тънко нарязано месо, подправки или овкусители. The third most commonly used plastic in the world. Raincoats, shoes, credit cards, laundry detergent containers, PVC pipe sprinkler system.</p>	<p>No</p>
<p>LDPE https://youtu.be/84lhHCcCoug</p> <p>Полиетилен с ниска плътност</p> <p>Симона, Велислав, Катерина, Михаела</p> <p style="text-align: center;">(TEAM 4)</p>	<p>Low-density polyethelene Can be squeezed easily Flexible and tough, unbreakable Can be translucent (полупрозрачен), coloured or opaque /əʊ'preɪk/ (непрозрачен) Smooth surface, UV transmission Organic solubility in organic solvents (органичена разтворимост в органични разтворители) The most widely used plastic (LDPE, MDPE and HDPE)</p>	<p>Containers and packaging supplies Sauces, lotions, creams, spreads, honey, eye drops, contact lens solution, shampoos, conditioners балсам, Common household products - bags for bread, dry cleaning, fresh produce, trash cans, coating for paper milk cartons, hot/cold beverage cups (чаши стабакс), shipping envelopes, outdoor lumber (дървен материал), Greenhouses Торбички/пазарски чанти, прозрачни и непрозрачни найлони за завиване</p>	<p>Yes</p>

<p>PP https://youtu.be/Yw75R-o4UJc</p> <p>Полипропилен</p> <p>Виктор, Алекс Св., Мартин, Николай</p> <p>(TEAM 5)</p>	<p>Polypropylene /ˌpɒl.iˈprɒp.ɪ.liːn/ Polypro Light type of plastic Opaque, flexible, high temperature, tear and impact resistant plastic непрозрачна, еластична, устойчива на високи температури, за разкъсване и на удар пластмаса Highly resistant to fatigue (износване) Less brittle to HDPE (чуплив) → used in moving parts Example – he opened and closed the lid 5000 times before the hinge broke (закрепващата част)</p>	<p>термоустойчиви пластмасови чаши капачки, сламки за пиене, кофички за кисело мляко, фолио, предмети за бита – електроизолационни и материали за строителството. опаковки – от пликчета до баки за боя и лепила.</p> <p>heat-resistant plastic cups, caps, drinking straws, yogurt buckets, foil, household items - electrical insulation and construction materials. packaging - from bags to paint and glue trays. Food packaging (withstand high temperatures – dishwashers and during industrial hot filling processes) Containers, lids, ropes, thermal underwear, carpets, lab equipment, speakers, auto parts, money</p>	
<p>PS https://youtu.be/Y0E_S-JWxME</p> <p>Стефан, Никола, Огнян</p> <p>(TEAM 6)</p>	<p>Polystyrene/ˌpɒl.iˈstaɪ.rɪːn/ One of the clearest plastic It can withstand up to 90 degrees Celsius Rigid plastic (твърд) Tends to be a brittle one. (крехък) Not flexible Can be in different colours Resistant to acid and base</p>	<p>Polystyrene container used to pack the food we couldn't eat at the restaurant in a go-to container. Single and double wall jars, round bottles, Supplements, vitamins, samples, dry products. Drinking straws, egg cartons, from plates and cups, cutlery (прибори за хранене), CD cases, etc. Parts of appliances, cables, thermal insulation boards, Protects products during transport.</p>	

<p>OTHERS https://youtu.be/TFco7uaJmL8</p> <p>Жаклин, Калян Г, Константин, Яна</p> <p style="text-align: center;">(TEAM 7)</p>	<p>All plastic not 1,2,3,4,5,6 are marked at 7. Phenolic, Acrylic, Polycarbonate, Fibreglass and Polyvinyl, thermoplastic Polytetrafluoroethylene PTFE – Teflon – the lowest</p> <p>polyactide, polycarbonate, fiberglass, thermoplastic elastomers, styrene maleic anhydride, styrene</p>	<p>non-stick coating for pans and other cookware containers and pipework PTFE reduces friction, wear, and energy consumption of machinery. It is used in surgery and as a coating on catheters. PTFE is forever chemical. Only since the start of the 21st century has the environmental impact and toxicity to human and mammalian life been studied in depth. Kitchen pots, pipes, in surgery</p>	
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<https://www.plasticsforchange.org/blog/different-types-of-plastic>

 PET	 HDPE	 PVC	 LDPE	 PP	 PS	 OTHER
POLYETHYLENE TEREPHTHALATE	HIGH-DENSITY POLYETHYLENE	POLYVINYL CHLORIDE	LOW-DENSITY POLYETHYLENE	POLYPROPYLENE	POLYSTYRENE	OTHER
WATER BOTTLES; JARS; CAPS 	SHAMPOO BOTTLES; GROCEY BAGS 	CLEANING PRODUCTS; SHEETINGS 	BREAD BAGS; PLASTIC FILMS 	YOGURT CUPS; STRAWES; HANGERS 	TAKE-AWAY AND HARD PACKAGING; TOYS 	BABY BOTTLES; NYLON; CDS 