## Senate Bill 1208

Sponsored by Senator ROBINSON; Senators LINTHICUM, NASH, STARR, WEBER

## SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure as introduced. The statement includes a measure digest written in compliance with applicable readability standards.

Digest: Declares a month in praise of plastics. (Flesch Readability Score: 90.9). Designates March of each year as Plastics Appreciation Month. Designates certain plastics and their uses to celebrate daily during March.

## A BILL FOR AN ACT

2 Relating to plastics.

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3 Whereas the invention of plastics has led to increased quality of life around the world; and

Whereas God blessed our country by making plastics possible and providing the materials with 4

 $\mathbf{5}$ which to make them; and

6 Whereas plastics are used to preserve and protect our food; and

7 Whereas plastics are essential to the medical industry; and

8 Whereas police, firefighters, emergency medical technicians and other first responders depend 9 on plastics; and

10 Whereas thousands of types of plastics exist and are used in many different applications; and

11 Whereas plastics are essential to the United States Armed Forces and Oregon National Guard; 12and

13 Whereas traditional hydrocarbon-fueled cars and airplanes, and most machines in use today, 14 depend on enormous numbers of various plastics; and

15Whereas even electric cars require a huge number of different types of plastics for the car to

16 function, and many drivers look through plastic glasses or contact lenses while they drive; and

17 Whereas plastics are cheap and easily molded; and

18 Whereas plastics are the common term used for a wide variety of polymers; now, therefore,

Be It Enacted by the People of the State of Oregon: 19

20 SECTION 1. (1) March of each year is designated as Plastics Appreciation Month.

21(2) Each day of March is further designated for celebration of a specific type or use of 22 plastics:

23(a) March 1, single-use plastics. This day recognizes the value of all varieties of single-use

24 plastics, including such uses as disposable utensils and other kitchenware and bags and in 25 preserving food and soaps;

26 (b) March 2, polypropylene (PP). The second most commonly used polymer, varieties of

PP are found in straws, bottle caps, compact disc jewel cases, packing tape, disposable 28diapers and signage;

29 (c) March 3, polyvinyl chloride (PVC). The third most widely used polymer, PVC is used 30 widely in plumbing, credit cards, rain gutters and many other applications;

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1 (d) March 4, polystyrene (PS). This plastic is most recognizable in everyday use as a 2 lightweight insulated product. Expanded polystyrene is used widely in such items as coffee 3 cups, egg cartons and takeout food containers;

4 (e) March 5, polytetrafluoroethylene (PTFE). Commonly known as Teflon, PTFE is an 5 unusually stable plastic. It is very unreactive due to the strength of the carbon-fluorine 6 bonds and is used (along with its many variations) throughout industry in applications that 7 require stable plastics, including tape for sealing pipes, nonstick pans, bearing seals and 8 lubricants;

9 (f) March 6, polychlorotrifluoroethylene (PCTFE). Commonly known as Kel-F, it is very 10 stable but forms a stiffer plastic, like Teflon. It is also very unreactive and is used in 11 cryogenic seals and corrosion-resistant containers. Because it is machinable, Kel-F is the 12 main component of liquid hydrogen fluoride equipment used in laboratory settings for peptide 13 synthesis and other reactions;

(g) March 7, perfluoroelastomer (FFKM). Commonly known as Kalrez, it is flexible and
 inert. It is used widely in corrosion-resistant valves, O-rings and gaskets;

(h) March 8, polyethylene terephthalate (PET or PETE). Widely used in such items as
beverage bottles, peanut butter jars and polyester clothing, PET is a very strong plastic and
can be molded so that light can travel through it with a minimum of distortion. It makes
excellent transparent containers;

(i) March 9, acrylonitrile butadiene styrene (ABS). ABS is used widely in piano keys and
 children's toys. Perhaps less visible, but critical to modern society, is its use in drain pipes
 and sewer systems;

(j) March 10, polylactic acid (PLA). PLA is the most common plastic used in 3D printers,
due to its low melting point, high strength and low thermal expansion. It is also very common in items such as laptop computers and automotive floor mats;

(k) March 11, polyvinyl alcohol (PVA). PVA is an extremely widely used polymer in glue
 and as a wetting agent in contact lenses;

(L) March 12, polyvinyl butyral (PVB). PVB is commonly used in automobile safety glass,
 solar modules and 3D printers;

(m) March 13, polycarbonates (PC). Easily molded, strong and able to be clear,
 polycarbonates are found in dome lights, capacitors, roofing sheets, swimming goggles,
 eyeglasses and safety glasses;

(n) March 14, polyisobutylene (PIB). A gummy and flexible plastic, PIB is commonly
 found in O-rings, caulks and inner tubes;

(o) March 15, polyvinyl fluoride (PVF). A water-repellent plastic with low flammability,
 PVF is found in airplane interiors, photovoltaic module backsheets and raincoats;

(p) March 16, ethylene tetrafluoroethylene (ETFE). Commonly known as Tefzel, ETFE is
an inert, chemically resistant polymer that has many Teflon-like properties. It is very strong
and resistant to ultraviolet light, and it is used in corrosion liners, skylights and specialized
wire coatings;

(q) March 17, ethylene chlorotrifluoroethylene (ECTFE). This inert and strong plastic is
stable at high temperatures and in corrosive environments. It is widely used for acid containment and hazardous materials transport;

(r) March 18, poly(azanediyl-1,4-phenyleneazanediylterephthaloyl). Commonly known as
 Kevlar, this extremely strong plastic makes incredibly lightweight fibers and is best known

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for its use in bulletproof vests. It is also used in bicycle tires and racing sails; 1 2 (s) March 19, polyacrylates. These are flexible and strong and can be transparent. Common uses are cosmetics, nail polish and adhesives; 3 (t) March 20, polysulfone (PSU). PSU is stable at high temperatures and strong. It is used 4 in wastewater recovery membranes, flame retardants and food pans;  $\mathbf{5}$ (u) March 21, ethylene-vinyl acetate (EVA). EVA is a soft rubber compound that is used 6 in glues and flexible shoes like flip-flops; 7 (v) March 22, acrylic resin. Acrylic resin is an excellent thermosetting plastic that can 8 9 be found in dentures, solar energy systems and surfboards; (w) March 23, polyvinyl formals. Commonly known as Formvar, this polymer is widely 10 used as electrical insulation on magnet wire and as a backing on magnetic tape. It is also 11 12used in aircraft adhesives; (x) March 24, low-density polyethylene (LDPE). LDPE is widely used in cling wrap, bread 13 bags, garbage bags and grocery bags. Polyethylene in its different varieties is the most 14 15 commonly used plastic polymer; (y) March 25, high-density polyethylene (HDPE). HDPE is commonly found in milk car-16 tons, buckets and children's toys; 17 18 (z) March 26, polyoxymethylene (POM). POM is used in precision plastic parts. It is easy to machine, chemically resistant, very strong and low friction, so it is well-suited to appli-19 cations involving moving parts; 20(aa) March 27, polyphthalamide (PPA). Commonly used in coolant pumps, LED headlights 2122and bearing pads, PPA is easily molded and resistant to high temperatures; 23(bb) March 28, poly(methyl methacrylate) (PMMA). A very strong and clear thermoplastic, PMMA is used in plastic windows as acrylic glass and also in coatings and 24 inks; 25(cc) March 29, poly(allyl diglycol carbonate) (PADC or CR-39). This strong, clear plastic 2627is very common in eyeglass lenses. It was also used in the fuel tanks of World War II B-17 bombers: 28(dd) March 30, nylon. Nylon is a family of synthetic polymers known for their strength, 2930 durability and softness. It is widely used in clothing and many other consumer goods; and 31 (ee) March 31, all other types of plastics and their uses not celebrated on a previous day of the month. 32

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