

Biggest use of plastics: product packaging

Q. How are plastics made? What are the primary uses of plastic?

A. Plastics are manufactured by two separate industries using two distinct processes:

1. The plastic resin-production industry is composed of some very large chemical companies. It converts industrial organic chemicals into plastic resins.

2. The plastic processing industry is made up of many small companies. These small companies extrude, inject, or blow-mold to form the resins into end products.

Plastic resins are made by linking



Terry Gibb

small groups of molecules or monomers into long chains called polymers. Through polymerization, propylene can be made into polypropylene; natural gas and crude oil are made into polyethylene terephthalate (PET); styrene into polystyrene; vinyl chloride into polyvinyl

chloride.

Chemical additives at either stage can transform a single resin into finished products bearing no resemblance to any other. The finished products may be flexible or rigid, transparent, opaque or colored, easy to tear or stronger than steel.

THE SINGLE largest use of plastics is in packaging. It accounts for one-quarter of all plastic used today.

There are six resins used to make plastic packaging: low-density polyethylene (LDPE); high-density polyethylene (HDPE); polystyrene (PS); polypropylene (PP); polyethylene terephthalate (PET); polyvinyl chloride (PVC).

Plastic packaging falls into four categories:

Plastic films, which represents 35 percent of all plastic packaging, is made from all six resins. Polyethylene (LDPE and HDPE) are used most frequently because they are strong and can keep out moisture. Examples include trash bags, plastic wrap and grocery bags.

PET is widely used for bottle-in-bag pouches because of its ability to withstand high temperatures. Nearly

all meat products are wrapped in PVC film that can keep meat from turning brown.

PLASTIC BOTTLES make up 27 percent of all plastic packaging. All six resins are used in their manufacture.

Polyethylene (low- and high-) are used to make tough, sturdy bottles where transparency is not required, such as milk jugs, bleach and detergent bottles and motor oil.

PET is used when transparency is needed. Plastic beverage bottles are made exclusively of PET because of its unique ability to retain carbonation.

Rigid plastic containers, such as cottage cheese or yogurt tubs, are now made with polyethylene, polypropylene and polystyrene, rather than coated paper containers. These rigid containers account for 24 per-

cent of the plastic packaging market. Polystyrene foam (known commonly to consumers as "styrofoam") has virtually replaced paper to make egg cartons, meat trays and insulated cups.

Plastic coatings, 14 percent of all plastic packaging, are used as barriers to protect paper or metal foil from moisture, oils or chemicals.

The milk carton that used to have a wax coating now is coated with plastic.

Screw tops and snap-on lids are frequently made from polypropylene and polystyrene.

Next Week: plastic pollution — front end and back.

The Consumer Mailbag answers your questions. Address mail to The Consumer Mailbag, Concern, Detroit, One Kennedy Square, 4th Floor, Detroit 48226.

Older drivers crash at signs

With age, a driver's chances of causing an accident increase. Motorists 70 and older are involved in a higher percentage of traffic sign accidents at intersections than younger drivers, an insurance official told members of the Society of Automotive Engineers (SAE).

"The responsibility for an accident increases as the motorist ages, with those age 70 and over involved in a higher number of stop sign and yield sign incidents," said Rene Monforton, AAA Michigan claim operations director.

He added that the increase may be attributed to a decline in visual and psychomotor skills.

PART OF the reason for more accidents among older drivers, he said, could be that vehicle and road systems are not designed to recognize driver declines based upon the aging

process.

Monforton spoke at an SAE seminar at Dearborn, reviewing the findings of a study of 3,381 claim files of AAA insureds age 55 and older. The study was coordinated by Monforton and Thaddeus Dumlal of AAA Michigan, Anthony Yank of General Motors environmental activities staff and Frank Richter, a gerontology research consultant.

"We looked at the claim files of accidents which could be substantiated by police reports between Nov. 1, 1985, and Oct. 31, 1986, in an attempt to determine if certain accident patterns become representative as drivers age," Monforton said.

The analysis was based on collisions involving stop and yield signs, entering a thoroughfare from driveway, traffic signals, rear ends, changing lanes, loss of control and non-intersection turns.

THE SURVEY found:

• Those under 55 years of age tended to be involved in a high percentage of rear-end and loss-of-control accidents, but a lower percentage of traffic signal accidents.

• The 55-64 and 65-70 year age groups showed a decrease in percentage of stop and yield sign accidents, but an increase in traffic signal accidents.

• The 70 and older group revealed a marked increase in percentage of stop and yield sign incidents, signal light accidents, entering from driveway accidents and non-intersection turn accidents.

• But the 70-up group had a smaller percentage of rear-end and loss-of-control situations.

• There is a trend for drivers over age 70 to be at fault at intersection accidents in Michigan.



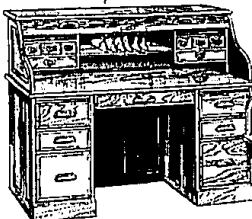
Located on the corner of Eleven Mile and Middlebelt.

Bring the whole family!
Questions call ... 478-8020

Fall into Spectacular Savings on Sligh Desks!



This Fall, equip your home office with a quality Sligh Desk at special savings. Sligh Desks are as functional as they are beautiful. Handcrafted of select hardwoods in a variety of traditional and contemporary designs, a Sligh Desk is a welcome addition to any home. These special prices make it an even greater value. So take advantage of this limited time offer today.



ROLL TOP DESK
• Oak Solids and Veneers
• Seven Drawers, Including Two 1st Drawers on Ball Bearing Slides
• Padded Writing Slide Over Each Pedestal
• Locking Laminate Roll Top
• 51" L x 29" W x 45" H

NOW \$999
SAVE \$150
Suggested Retail \$1,149



KNEEHOLE DESK
• Cherry and Hardwood Solids and Veneers
• Dark Brown Bonded Leather Top with 22-Karat Gold Tooling
• File Drawer in Each Pedestal
• Also available in Mahogany
• 48" L x 31 1/2" W x 29 1/2" H

NOW \$599
SAVE \$400
Suggested Retail \$999

Sligh

For people who know the difference.

Stewart-Glenn

2600 N. Woodward Ave.
Just South of Square Lake Rd.
Fine Furniture Since 1917

of Bloomfield Hills

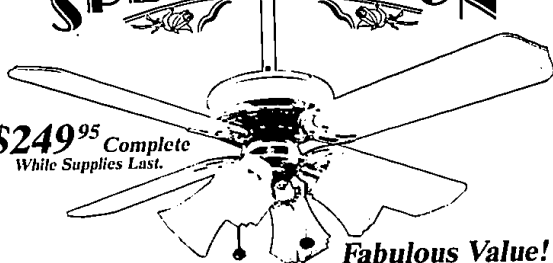
332-8348

Open Mon., Thurs., Fri. 'til 9 p.m.
Tues., Wed., Sat. 'til 5:30 p.m.

CASABLANCA'S
100TH ANNIVERSARY

ROSE PARADE SPECIAL EDITION

\$249⁹⁵ Complete
White Supplies Last.



Fabulous Value!

Gallery Edition, 5 blade, 3 speed 50" fan with turbo body. Snow white and bright brass with light kit. Choose from an assortment of glass fixtures to complement any decor.

CASABLANCA ROSE PARADE CONTEST

- Ride the Casablanca Float in the Rose Parade
- Attend the Rose Bowl Football Game
- Round trip airfare for two to L.A.
- Three days/two nights at Villa Casablanca
- \$1,000 cash spending money

Ask us about details

Lighting Fixtures For Every Theme • Wiring Supplies and Light Bulbs

BROSE ELECTRICAL CONSTRUCTION INC.

37400 W 7 MILE ROAD
LIVONIA, MI 48152 • (313) 464-2211



MON., TUES., WED., SAT. 9:30-6:00
THURS., FRI. 9:30-8:00

ELECT BARBARA A.



DUMOUCHELLE

REPUBLICAN

STATE BOARD OF EDUCATION



☒ **14 years of experience** on the Michigan State Board of Education; service as president, vice president and treasurer

☒ **Member, Board of Directors** of Michigan Education Trust (Michigan's new tuition guarantee program)

☒ **Slans Heights College graduate** with high honors; later awarded honorary Doctor of Humane Letters degree

☒ **Advocate for quality education** for all Michigan children in both public and non-public schools

☒ **Member, Sacred Heart Parish** Grosse Ile, past president of parish council; former member of Gabriel Richard Catholic High School Board, Riverview

☒ **Teaching experience** in both elementary and high schools, public and parochial schools, large and small schools

☒ **Endorsed by:**
• Central Citizens Committee of Greater Detroit

• Michigan Education Association

• Michigan Association of School Administrators

• Michigan Farm Bureau

• Michigan Right-to-Life

VOTE NOV. 8

Filed for by Dumouchelle Campaign Committee, 29755 East River Rd., Grosse Ile, MI 48138