

The Evolution of PPG's Optical Products Business

	1940 CR-39™ monomer is developed by a research team at Columbia Southern Chemical Company, a wholly-owned subsidiary of Pittsburgh Plate Glass Co. (now PPG).
	1943 CR-39 monomer first used for reflector and searchlight applications.
	1945 CR-39 monomer patent awarded to PPG's Irving E. Muskat and Franklin Strain.
	1947 Armorlite Corporation forms and begins experimenting with CR-39 monomer.
	1952 LOS introduces ORMA® lenses made from Plexiglass resin in France.
	1956 ORMA 1000 lenses made from CR-39 monomer introduced in France.
	1959 ORMA 1000 lenses introduced worldwide.
	1960 First plastic bifocals are cast. SOLA Optical formed and begins producing lenses made from CR-39 monomer in Australia with 10 employees.
	1961-66 SOLA begins exporting lenses made from CR-39 monomer to Japan, England, France, Italy, India and other countries.
	1969 La Lunette de Paris introduces ORMA 1000 lenses to the United States.
	1973 PPG's Barberton Technical Center conducts the first photochromic experiments with CR-39 monomer.
	1974 3M develops scratch-resistant coating for lenses made from CR-39 monomer.
	1975 Lenses made from CR-39 monomer account for 15 percent of all lenses in the U.S.
	1981 American Optical introduces Photolite photochromic lenses.
	1983 PPG discovers new family of photochromics, the blue pyridobenzoxazines.
	1986 PPG starts one-year \$1 million program to test technical and marketing feasibility of plastic photochromic lenses.
	1988 PPG researchers at the company's technical center in Monroeville, PA produce a prototype of plastic photochromic lenses.
	1990 Transitions Optical, Inc. (TOI) is formed as a joint venture between PPG Industries and Essilor International and begins manufacturing Transitions® Lenses.
	1992 Researchers in Monroeville develop Transitions Plus comfort lenses, a faster acting photochromic lens.
	1994 SOLA introduces Spectralite® optical lenses, the first photochromic high index lens.
	1996 The third generation Transitions III Lenses are introduced in Spectralite lens and 1.56 high index.
	1997 PPG celebrates the 50th anniversary of lenses made from CR-39 monomer.
	1998 PPG's new Hi-Gard™ 1080 scratch resistant coating is first commercialized by SOLA for use on lenses made from CR-39 monomer.
	2001 PPG develops the Hi-Gard™ 1600 scratch resistant coating for high index lens substrates and launches Trivex™ monomer, the world's first tri-performance lens material, with Hoya and Younger Optics.
	2002 Generation IV Transitions Lenses are developed and launched. Trivex material is granted the prestigious Optical Laboratories Association Award of Excellence in the "Best in Lens Materials" category.
	2004 Transitions V Lenses with ESP™ (Enhanced Scientific Performance) are launched for use with premium lens materials.
	2005 PPG acquires International Polarizer, the world's largest manufacturer of sunglass polarizers, located in Marlborough, MA.
	2006 PPG honors the 60th anniversary of the CR-39 patent award by launching the CR-39 Licensed Lens Caster Program to recognize caster partners who have invested in and continue to support the proper use and promotion of CR-39 monomer globally. PPG acquires Intercast Europe, S.p.A., the world's leading manufacturer of nonprescription hard resin sunlenses.