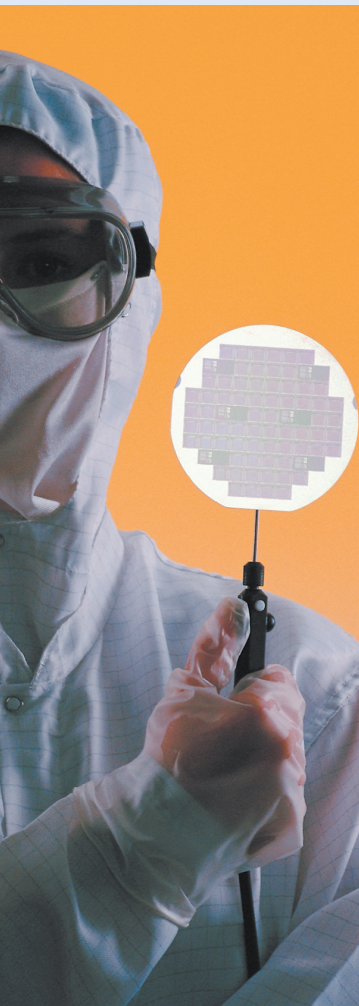


DuPont™ Zyron® Electronic Gases

For Plasma Process Applications



DuPont continues to develop high purity fluorine containing gases to meet the evolving needs of the semiconductor processing industry as new generations of thin-film plasma processes are developed.

Building on its long history of expertise and innovation in the manufacture, purification, packaging and analysis of fluorinated molecules, DuPont is uniquely positioned to deliver to the industry the high purity fluorinated gases today's advanced processes demand. Along with this broad foundation in fluorine chemistry comes a product stewardship commitment to provide the physical property, safety and handling information necessary to enable the safe and efficient use of the Zyron® family of gases in plasma based process applications.

Zyron® 116 C_2F_6 , hexafluoroethane, is the established gas of choice for cleaning many chemical vapor deposition chamber tools as well as in selected etch processes.

Zyron® 8020 $c-C_4F_8$, octafluorocyclobutane, is a grade of this familiar oxide etching gas specially designed by DuPont for fast, economical, and low emission cleaning of (PE) CVD chambers.

Zyron® 23 CF_3H , trifluoromethane, is a long-standing gas used as a component in various recipes, predominantly for the etching of silicon dioxide dielectric layers. CF_3H has also been used for etching a wide variety of other silicon-based dielectric films.

Zyron® C318 $c-C_4F_8$, octafluorocyclobutane, is a cyclic perfluorocarbon gas which has found applications in many of the recently developed and emerging high-density plasma (HDP) processes for high selectivity etching of silicon dioxide films.

Zyron® 32 CF_2H_2 , difluoromethane, is a hydrofluorocarbon produced in high purity for etch applications. Its unique hydrogen-to-fluorine ratio allows its use, along with other fluorocarbon gases, in several emerging processes for the etching of silicon-based dielectrics.

Zyron® 125 CF_2HCF_3 , pentafluoroethane is a high purity hydrofluorocarbon which has applications in gas mixtures used for selective and directional etching of a variety of silicon based dielectric films.



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