

## SILICA ALUMINA CATALYSTS

"We are working to develop highly selective catalysts and catalytic processes for various reactions such as alkylation, acylation, oxidation, hydroxylation, isomerization, nitration etc. The main focus of the organization is to work in collaboration with customers, their partners in development and make available these catalysts on commercial scale to help replace the conventional polluting, non-catalytic processes with environmentally clean and more efficient processes."

**Note:** in all the above trade names last Character represents form of the catalyst as follows

Sr. No.	Character	Form of catalyst
1	P	Powder
2	E	Extrudes
3	S	Spheres
4	T	Tablets

## SILICA ALUMINA CATALYSTS

Grades	Application	Examples
PROCAT™ ZB0P	Acylation	Acylation of anisole
	Nitration	Nitration of toluene
PROCAT™ ZM0E	Isomerization	Xylene Toluidine Cresols
PROCAT™ ZMd0E	Alkylation	Alkylation of m-cresol to Thymol
PROCAT™ ZT0P	Hydroxylation	Anisole to MEHQ & Guaiacol Phenol to Hydroquinone & Catechol
	Epoxidation	Propylene to Propylene Oxide Styrene to Styrene Oxide
	Selective opening of Epoxide ring	Styrene Oxide to Phenol acetaldehyde (PAA)
PROCAT™ ZX2E	O-alkylation	PC to PCME Phenol to Anisole

## ALUMINA CATALYSTS

Grades	Application	Examples
PROCAT™ AG0E	Dehydration	Dehydration of alcohol
PROCAT™ AP0E-50	O-Alkylation	Catechol to Guaiacol
PROCAT™ AP0E-30	Dehydration & ring formation	DEG to 1,4 Dioxane
	Dehydration	Dehydration of Alcohols to Ethers

## SILICA CATALYSTS

Grades	Application	Examples
PROCAT™ ZS0P	Epoxidation	Styrene to Styrene Oxide
PROCAT™ SS0P	Nitration	Nitration of Benzene, Toluene
PROCAT™ SS11P	Esterification	Ethanol to Ethyl Acetate
PROCAT™ SS12P		

